

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Shin J. Lee Examiner #: 76060 Date: 8-11-2005  
Art Unit: 1752 Phone Number 301-21333 Serial Number: 10/1743,441  
Mail Box and Bldg/Room Location: 9D60 (CR&M) Results Format Preferred (circle): RAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Plz. see B.b.

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: \_\_\_\_\_

SCIENTIFIC REFERENCE BR  
Sci & Tech Inf. Ctr

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Pat. & T.M. Office

Please search for a polymer  
having a ~~polymer~~ repeat unit (A')  
shown in Cl. #2

\*\*\*\*\*

## STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>Ushu</u>	NA Sequence (#) _____	STN <u>8/417-12</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: <u>9/9/05</u>	Bibliographic _____	Dr.Link _____
Date Completed: <u>9/9/05</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>40</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: <u>30</u>	Patent Family _____	WWW/Internet _____
Online Time: <u>120</u>	Other _____	Other (specify) _____

=> fil reg

FILE 'REGISTRY' ENTERED AT 15:07:55 ON 09 SEP 2005

=> d his

FILE 'HCAPLUS' ENTERED AT 13:05:34 ON 09 SEP 2005  
L1 0 S US20040137366/PN

FILE 'WPIX' ENTERED AT 13:07:14 ON 09 SEP 2005  
L2 1 S L1

FILE 'HCAPLUS' ENTERED AT 13:08:57 ON 09 SEP 2005  
L3 73 S KAWAUCHI I?/AU  
L4 1892 S NAKAMURA I?/AU  
L5 1705 S TSUCHIYA M?/AU  
L6 4 S L3 AND L4 AND L5  
L7 1 S L6 AND HEAT?  
L8 4 S L6 AND LITHOGRA?  
SEL RN

FILE 'REGISTRY' ENTERED AT 13:12:18 ON 09 SEP 2005  
L9 86 S E1-E86

FILE 'LREGISTRY' ENTERED AT 13:40:49 ON 09 SEP 2005  
L10 STR

FILE 'REGISTRY' ENTERED AT 13:52:52 ON 09 SEP 2005  
L11 SCR 2043  
L12 50 S L10 AND L11  
L13 STR L10  
L14 23 S L13 AND L11  
L15 3527 S L13 AND L11 FUL  
SAV L15 LEE441/A

FILE 'HCAPLUS' ENTERED AT 14:03:47 ON 09 SEP 2005  
L16 2417 S L15  
E LITHOGR?  
E LITHOGRAPH  
L17 195 S L16(L) LITHOGRAPH?  
L18 15 S L17 AND HEAT(A) SENSITIV?  
L19 19 S L17 AND PRECURSOR?  
L20 31 S L18 OR L19

FILE 'REGISTRY' ENTERED AT 15:07:55 ON 09 SEP 2005

=> d que l16

L11 SCR 2043  
L13 STR

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|| @9 10 @13 @11 12  
CH2=C~G1~G2~C=O  
1 2 3 4 5 6

VAR G1=CB/9/13-2 11-4/11-2 13-4

REP G2=(0-5) 8

NODE ATTRIBUTES:

NSPEC IS RC AT 8

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L15 3527 SEA FILE=REGISTRY SSS FUL L13 AND L11  
L16 2417 SEA FILE=HCAPLUS ABB=ON PLU=ON L15

=> fil hcap  
FILE 'HCAPLUS' ENTERED AT 15:08:18 ON 09 SEP 2005

=> d l20 1-31 ibib abs hitstr hitind

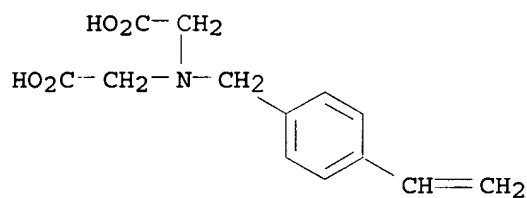
L20 ANSWER 1 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:303261 HCAPLUS  
DOCUMENT NUMBER: 142:382218  
TITLE: Lithographic printing plate **precursor**  
and lithographic printing method  
INVENTOR(S): Makino, Naonori; Inno, Toshifumi; Yamasaki,  
Sumiaki  
PATENT ASSIGNEE(S): Japan  
SOURCE: U.S. Pat. Appl. Publ., 35 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

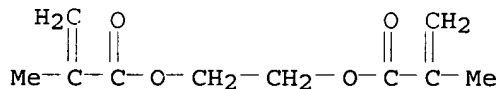
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2005074692	A1	20050407	US 2004-951700	2004 <u>0929</u>
JP 2005125749	A2	20050519	JP 2004-265735	2004 0913
PRIORITY APPLN. INFO.:			JP 2003-339391	A 2003 0930

AB A lithog. printing plate **precursor** comprises: a support;  
and at least one layer comprising an image-recording layer, the  
image-recording layer comprising (A) an IR absorber, (B) a polymerization  
initiator, (C) a polymerizable compound, and (D) a binder polymer,  
wherein the image recording layer is capable of being removed with  
at least one of a printing ink and a fountain solution, wherein at  
least one of said at least one layer comprises a copolymer having  
(a1) a unit comprising at least one ethylenically unsatd. bond,  
and (a2) a unit comprising at least one functional group  
interacting with a surface of the support. And a lithog. printing  
method in which the lithog. printing plate **precursor** is  
used. The copolymer preferably has a hydrophilic segment. The  
copolymer preferably is contained in an undercoat layer formed  
between the support and the image-recording layer.

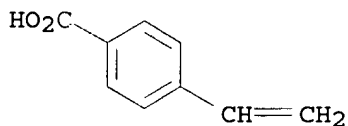
IT 194715-96-3P 849467-38-5P 849467-41-0P  
 849467-48-7P 849467-49-8P 849467-50-1P  
 (lithog. printing plate precursor containing)  
 RN 194715-96-3 HCAPLUS  
 CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer  
 with 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX  
 NAME)  
 CM 1  
 CRN 46917-20-8  
 CMF C13 H15 N O4



CM 2  
 CRN 97-90-5  
 CMF C10 H14 O4



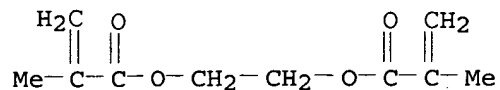
RN 849467-38-5 HCAPLUS  
 CN Benzoic acid, 4-ethenyl-, sodium salt, polymer with 1,2-ethanediyl  
 bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 77124-40-4  
 CMF C9 H8 O2 . Na



● Na

CM 2  
 CRN 97-90-5

CMF C10 H14 O4



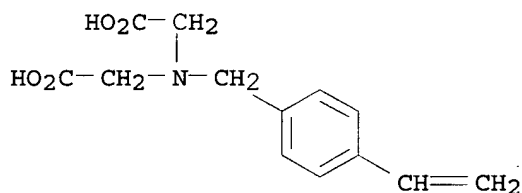
RN 849467-41-0 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, disodium salt, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI)  
(CA INDEX NAME)

CM 1

CRN 68517-06-6

CMF C13 H15 N O4 . 2 Na

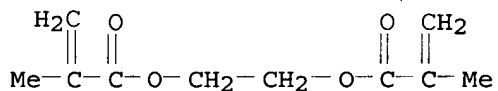


● 2 Na

CM 2

CRN 97-90-5

CMF C10 H14 O4



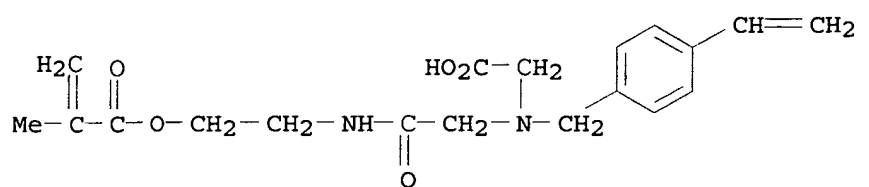
RN 849467-48-7 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, disodium salt, polymer with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 849467-47-6

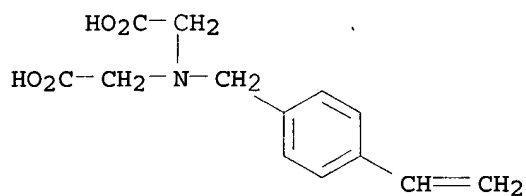
CMF C19 H24 N2 O5



CM 2

CRN 68517-06-6

CMF C13 H15 N O4 . 2 Na



● 2 Na

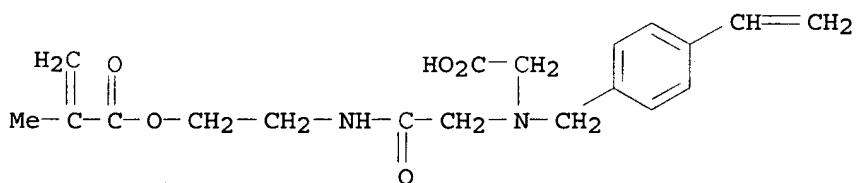
RN 849467-49-8 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]aminoethyl 2-methyl-2-propenoate and N-(1-methylethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 849467-47-6

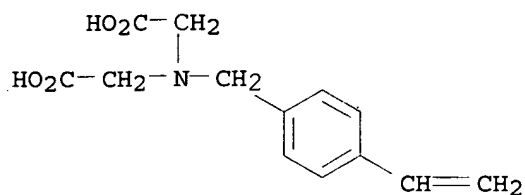
CMF C19 H24 N2 O5



CM 2

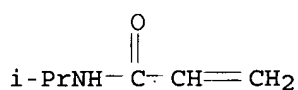
CRN 46917-20-8

CMF C13 H15 N O4



CM 3

CRN 2210-25-5  
 CMF C6 H11 N O

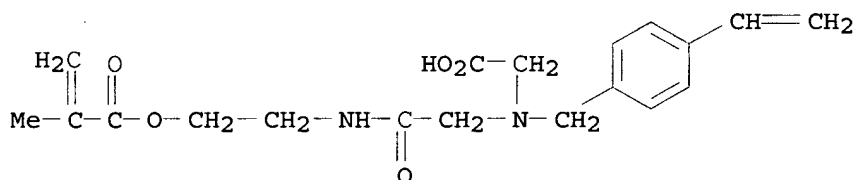


RN 849467-50-1 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]amino]ethyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

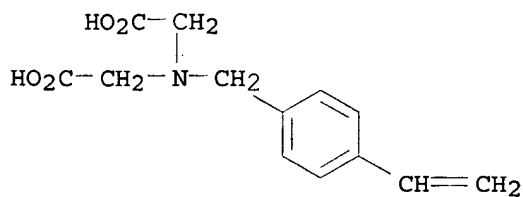
CM 1

CRN 849467-47-6  
 CMF C19 H24 N2 O5



CM 2

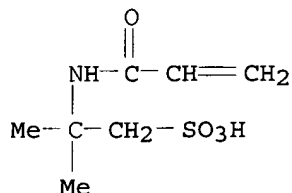
CRN 46917-20-8  
 CMF C13 H15 N O4



CM 3

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

IC ICM G03C001-76

INCL 430270100

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

ST lithog printing plate **precursor**

IT Optical materials

(IR absorbers; lithog. printing plate **precursor** and lithog. printing method)

IT IR materials

(absorbers; lithog. printing plate **precursor** and lithog. printing method)

IT Lithographic plates

(lithog. printing plate **precursor** and lithog. printing method)IT 83176-82-3P 93441-11-3P **194715-96-3P****849467-38-5P** 849467-39-6P 849467-40-9P**849467-41-0P** 849467-43-2P 849467-44-3P 849467-45-4P849467-46-5P **849467-48-7P** **849467-49-8P****849467-50-1P** 849467-51-2P 849467-52-3P 849467-53-4P

849467-54-5P 849467-55-6P

(lithog. printing plate **precursor** containing)

L20 ANSWER 2 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:215777 HCAPLUS

DOCUMENT NUMBER: 142:269282

TITLE: **Heat-sensitive**

lithographic printing master plates for development-free CTP (computer-to-plate) system with improved wear resistance

INVENTOR(S): Yamazaki, Sumiaki; Aoshima, Norio

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 32 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE



JP 2005059378

A2

20050310

JP 2003-292225

2003

0812

PRIORITY APPLN. INFO.:

JP 2003-292225

2003

0812

AB The plates have ink-receiving layers (A) containing polymers bearing cationic groups, groups including 2 carbonyls linked via 1 of C or N atom, and/or lactone groups, hydrophilic layers (B) containing colloidal particles of oxides or hydroxides of Be, Mg, Al, Si, Ti, B, Ge, Sn, Zr, Ir, V, Sb, and/or transition metals, and optionally hydrophilic overcoat layers (C, removable on printers) in this order on supports, wherein A, B, and/or C contain light-heat converting agents.

IT 220227-02-1

(binder, ink-receiving layer; **heat-sensitive lithog.** printing plates with good wear resistance for development-free CTP system)

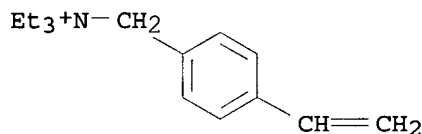
RN 220227-02-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 14350-43-7

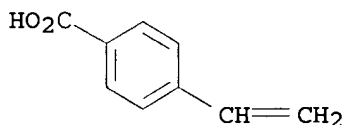
CMF C15 H24 N . Cl

● Cl<sup>-</sup>

CM 2

CRN 1075-49-6

CMF C9 H8 O2



IC ICM B41N001-14

ICS G03F007-00; G03F007-004; G03F007-11

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and

Other Reprographic Processes)  
 Section cross-reference(s): 38

ST lithog plate oxide hydrophilic coating CTP; **heat sensitive** printing plate IR absorber; wear resistance cationic polymer ink receiver

IT Optical materials  
 (IR absorbers; **heat-sensitive** lithog. printing plates with good wear resistance for development-free CTP system)

IT IR materials  
 (absorbers; **heat-sensitive** lithog. printing plates with good wear resistance for development-free CTP system)

IT Polymers, uses  
 (bearing cationic, dicarbonyl, or lactone groups, binder, ink-receiving layer; **heat-sensitive** lithog. printing plates with good wear resistance for development-free CTP system)

IT Hydroxides (inorganic)  
 Oxides (inorganic), uses  
 (colloidal particle, hydrophilic layer; **heat-sensitive** lithog. printing plates with good wear resistance for development-free CTP system)

IT Lithographic plates  
 (**heat-sensitive** lithog. printing plates with good wear resistance for development-free CTP system)

IT Colloids  
 (hydrophilic layer; **heat-sensitive** lithog. printing plates with good wear resistance for development-free CTP system)

IT Silica gel, uses  
 (hydrophilic layer; **heat-sensitive** lithog. printing plates with good wear resistance for development-free CTP system)

IT 134127-48-3  
 (IR absorber, ink-receiving layer; **heat-sensitive** lithog. printing plates with good wear resistance for development-free CTP system)

IT 27901-88-8 220227-02-1 845867-51-8 845867-52-9  
 845867-53-0 845867-54-1 845867-55-2  
 (binder, ink-receiving layer; **heat-sensitive lithog.** printing plates with good wear resistance for development-free CTP system)

IT 9000-01-5, Arabic gum  
 (binder, overcoat layer; **heat-sensitive** lithog. printing plates with good wear resistance for development-free CTP system)

IT 7631-86-9, Silica, uses  
 (colloidal particle, hydrophilic layer; **heat-sensitive** lithog. printing plates with good wear resistance for development-free CTP system)

IT 9003-01-4, Acrylic acid polymer  
 (hydrophilic layer; **heat-sensitive** lithog. printing plates with good wear resistance for development-free CTP system)

IT 37321-70-3, JIS A 1050  
 (support; **heat-sensitive** lithog. printing plates with good wear resistance for development-free CTP system)

L20 ANSWER 3 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2005:122676 HCAPLUS  
 DOCUMENT NUMBER: 142:228751  
 TITLE: Radical polymerizable composition and  
 lithographic printing plate **precursor**  
 using the same  
 INVENTOR(S): Kakino, Ryuki; Kunita, Kazuto  
 PATENT ASSIGNEE(S): ~~Fuji Photo Film Co., Ltd., Japan~~  
 SOURCE: U.S. Pat. Appl. Publ., 45 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005031986	A1	20050210	US 2004-900169	2004 0728
JP 2005062856	A2	20050310	JP 2004-220626	2004 0728
PRIORITY APPLN. INFO.:			JP 2003-202332	A 2003 0728

AB A radical polymerizable composition comprises (A) an alkali-soluble resin containing a radical polymerizable group, (B) a radical polymerizable compound, and (C) a radical initiator, wherein reactivity of a polymerizable group of the polymerizable compound (B) to a polymerizable group of the polymerizable compound (B) is larger than reactivity of a polymerizable group of the polymerizable compound (B) to a radical polymerizable group of the alkali-soluble resin (A), and a reactivity of a radical polymerizable group of the alkali-soluble resin (A) to a polymerizable group of the polymerizable compound (B) is larger than reactivity of a radical polymerizable group of the alkali-soluble resin (A) to a radical polymerizable group of the alkali-soluble resin (A).

IT 840488-60-0P

(radical polymerizable composition for lithog. printing plate **precursor** containing)

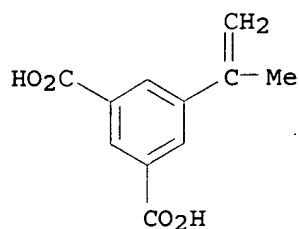
RN 840488-60-0 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-(1-methylethenyl)-, polymer with (4-ethenylphenyl)methyl 2-methyl-2-propenoate and 1-methylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 840488-59-7

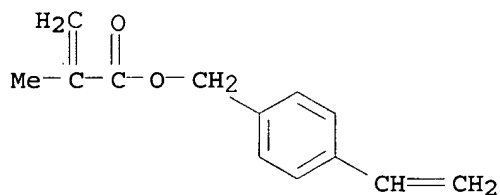
CMF C11 H10 O4



CM 2

CRN 99413-45-3

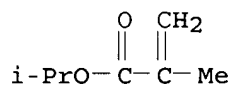
CMF C13 H14 O2



CM 3

CRN 4655-34-9

CMF C7 H12 O2



IC ICM G03C001-76

INCL 430270100

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

ST radical polymerizable compn lithog printing plate

**precursor**

IT Lithographic plates

(radical polymerizable composition and lithog. printing plate

**precursor** using same)

IT 840488-52-0P 840488-53-1P 840488-54-2P 840488-55-3P

840488-56-4P 840488-57-5P 840488-58-6P **840488-60-0P**

840488-61-1P

(radical polymerizable composition for lithog. printing plate **precursor** containing)

IT 1985-51-9 3290-92-4 29570-58-9 79559-96-9 158464-09-6

(radical polymerizable composition for lithog. printing plate **precursor** containing)

L20 ANSWER 4 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:1080080 HCAPLUS

DOCUMENT NUMBER: 142:65347  
 TITLE: **Heat-sensitive**  
 positive-working lithographic printing plate  
**precursors**  
 INVENTOR(S): Sasaki, Hideto  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 40 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004354905	A2	20041216	JP 2003-155257	2003 0530

PRIORITY APPLN. INFO.: JP 2003-155257  
 2003  
 0530

AB The title **precursor** has an intermediate layer containing a polymer and an image-recording layer, which increases the solubility towards an alkaline solution by heat, on an aluminum support, which is roughened, anodized, and treated with alkali metal silicate, wherein the anodization provides 3-8  $\mu$ m average pore size in the formed surface layer, wherein the support has 1-10 mg/m<sup>2</sup> of fixed Si on the surface, and wherein the intermediate layer is made of 10-40 mg/m<sup>2</sup> coating. The **precursor** shows good development properties and provides printing plate of high printing durability.

IT 220227-02-1, 4-Vinylbenzoic acid-Triethyl(p-vinylbenzyl)ammonium chloride copolymer  
 (intermediate layer; **heat-sensitive**  
 pos.-working lithog. printing plate  
**precursors**)

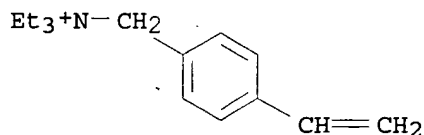
RN 220227-02-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 14350-43-7

CMF C15 H24 N . Cl

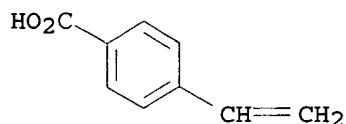


● Cl<sup>-</sup>

CM 2

CRN 1075-49-6

CMF C9 H8 O2



IC ICM G03F007-11  
ICS G03F007-00; G03F007-09  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)  
ST heat pos lithog printing plate **precursor** support  
intermediate layer  
IT Anodization  
Surface roughness  
(**heat-sensitive** pos.-working lithog.  
printing plate **precursors**)  
IT Lithographic plates  
(**precursors, heat-sensitive,**  
pos.-working; **heat-sensitive** pos.-working  
lithog. printing plate **precursors**)  
IT 12627-13-3D, Silicate, alkali metal  
(**heat-sensitive** pos.-working lithog.  
printing plate **precursors**)  
IT 220227-02-1, 4-Vinylbenzoic acid-Triethyl (p-  
vinylbenzyl) ammonium chloride copolymer  
(intermediate layer; **heat-sensitive**  
pos.-working lithog. printing plate  
**precursors**)  
IT 39364-62-0  
(support; **heat-sensitive** pos.-working  
lithog. printing plate **precursors**)

L20 ANSWER 5 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:1076959 HCAPLUS

DOCUMENT NUMBER: 142:65344

TITLE: **Heat-sensitive**  
positive-working lithographic printing plate  
**precursors**

INVENTOR(S): Sasaki, Hideto

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004354918	A2	20041216	JP 2003-155431	2003

PRIORITY APPLN. INFO.:

JP 2003-155431

0530

2003

0530

AB The title **precursor** has an intermediate layer containing a polymer and an image-recording layer, which increases solubility towards an alkaline solution by heat, on an aluminum support, wherein the intermediate layer has  $\geq 50$  % surface carbon concentration by X-ray electron spectroscopy anal. and wherein the support has  $\geq 6$  mg/m<sup>2</sup> absorption of the polymer used for the intermediate layer by dipped in 5 % polymer in MeOH solution at 25° C for 300 s and washed with methanol. The **precursor** shows good development properties and provides printing plate of high printing durability.

IT **808143-96-6**, Triethyl(p-vinylbenzyl)ammonium chloride-4-vinylbenzoic acid-2-Propenoic acid, tetrahydro-2-oxo-3-furanyl ester copolymer (intermediate layer; **heat-sensitive** pos.-working lithog. printing plate **precursors**)

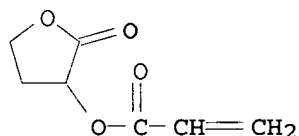
RN 808143-96-6 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid and tetrahydro-2-oxo-3-furanyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 328249-37-2

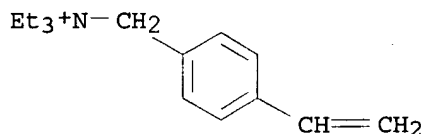
CMF C7 H8 O4



CM 2

CRN 14350-43-7

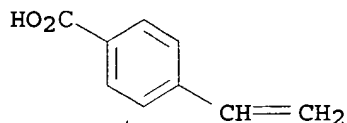
CMF C15 H24 N . Cl



● Cl<sup>-</sup>

CM 3

CRN 1075-49-6  
CMF C9 H8 O2



IC ICM G03F007-11  
ICS G03F007-00; G03F007-004  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST heat pos lithog printing plate **precursor** support intermediate layer  
IT Lithographic plates  
(**precursors**, **heat-sensitive**, pos.-working; **heat-sensitive** pos.-working lithog. printing plate **precursors**)  
IT 808143-96-6, Triethyl (p-vinylbenzyl) ammonium chloride-4-vinylbenzoic acid-2-Propenoic acid, tetrahydro-2-oxo-3-furanyl ester copolymer (intermediate layer; **heat-sensitive** pos.-working lithog. printing plate **precursors**)  
IT 7429-90-5, Aluminum, uses (support; **heat-sensitive** pos.-working lithog. printing plate **precursors**)

L20 ANSWER 6 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2004:1038492 HCAPLUS  
DOCUMENT NUMBER: 142:45928  
TITLE: Presensitized positive-working lithographic plate master showing excellent printability as well as smear resistance  
INVENTOR(S): Takahashi, Miki; Sasaki, Hideto; Hotta, Hisashi  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 51 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004341141	A2	20041202	JP 2003-136545	2003 0514
PRIORITY APPLN. INFO.: JP 2003-136545				2003 0514

AB The title lithog. plate master includes an intermediate layer interposed between a hydrophilic support and a pos.-working



heat-sensitive layer, wherein the intermediate layer contains a compound capable of interacting to a water-insol. alkali-soluble polymer. The compound is a polymer having a functional side chain(s) selected from -Y-Ar, -Y-(C<sub>n</sub>H<sub>2n</sub>O)<sub>m</sub>-R<sub>1</sub>, -Y-CO-NR<sub>3</sub>R<sub>2</sub>, and -Y-NR<sub>5</sub>-CO-R<sub>4</sub> [Y = single bond, connection group; Ar = N-containing heteroaryl; R<sub>1-5</sub> = H, C<sub>1-30</sub>-hydrocarbyl; m = 1-100; n ≥ 2].

IT 604813-21-0 803729-44-4

(in intermediate layer of presensitized pos.-working lithog. plate master showing excellent printability as well as smear resistance)

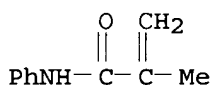
RN 604813-21-0 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with 2-methyl-N-phenyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 1611-83-2

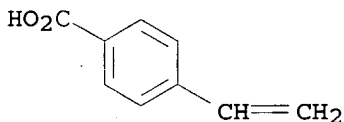
CMF C10 H11 N O



CM 2

CRN 1075-49-6

CMF C9 H8 O2



RN 803729-44-4 HCAPLUS

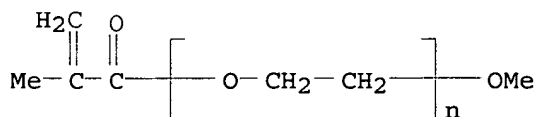
CN Benzoic acid, 4-ethenyl-, polymer with α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

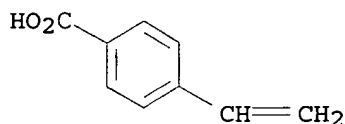
CMF (C2 H4 O)<sub>n</sub> C5 H8 O2

CCI PMS



CM 2

CRN 1075-49-6  
CMF C9 H8 O2



IC ICM G03F007-11  
ICS G03F007-00; G03F007-004  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
IT 9003-39-8 25232-41-1 28062-44-4 604813-21-0  
803729-44-4 803729-45-5  
(in intermediate layer of presensitized pos.-working lithog. plate master showing excellent printability as well as smear resistance)

L20 ANSWER 7 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:876832 HCAPLUS  
DOCUMENT NUMBER: 141:372803  
TITLE: Positive-working lithographic printing master plate having graft copolymer interlayer on support  
INVENTOR(S): Tashiro, Hiroshi; Takahashi, Miki, Hotta, Hisashi  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004294908	A2	20041021	JP 2003-89094	2003 0327

PRIORITY APPLN. INFO.: JP 2003-89094

2003  
0327  
2003  
0327

AB Disclosed is the pos.-working lithog. printing master comprising on a support a graft copolymer interlayer, a water-soluble lower layer containing an alkali-soluble resin, and a water-soluble upper heat-sensitive layer containing an alkali-soluble resin and an IR-absorbing dye in the order. The use of the interlayer provided excellent sensitivity, development latitude, and printing durability.

IT 777948-09-1P, p-Vinylbenzoic acid-glycidyl methacrylate-vinylbenzyltriethylammonium chloride graft copolymer  
777948-10-4P, p-VinylBenzoic acid-glycidyl methacrylate- $\alpha$ -methacryloyloxy- $\gamma$ -butyrolactone graft copolymer  
(pos.-working lithog. printing master plate having

graft copolymer interlayer on support)

RN 777948-09-1 HCAPLUS

CN Benzenemethanaminium, ar-ethenyl-N,N,N-triethyl-, polymer with 4-ethenylbenzoic acid and oxiranylmethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 112708-38-0

CMF C15 H24 N

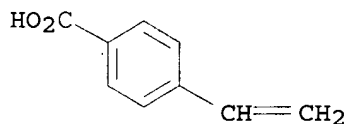
CCI IDS

D1-CH=CH<sub>2</sub>Et<sub>3</sub><sup>+</sup>N-CH<sub>2</sub>-D1

CM 2

CRN 1075-49-6

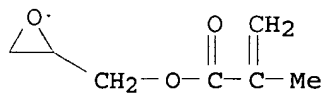
CMF C9 H8 O2



CM 3

CRN 106-91-2

CMF C7 H10 O3



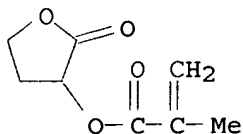
RN 777948-10-4 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with oxiranylmethyl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 195000-66-9

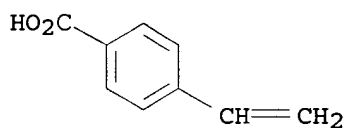
CMF C8 H10 O4



CM 2

CRN 1075-49-6

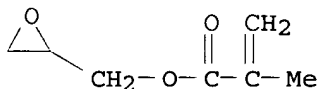
CMF C9 H8 O2



CM 3

CRN 106-91-2

CMF C7 H10 O3



IC ICM G03F007-11

ICS G03F007-00; G03F007-004

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

IT 777948-09-1P, p-Vinylbenzoic acid-glycidyl methacrylate-vinylbenzyltriethylammonium chloride graft copolymer  
 777948-10-4P, p-Vinylbenzoic acid-glycidyl methacrylate- $\alpha$ -methacryloyloxy- $\gamma$ -butyrolactone graft copolymer

(pos.-working lithog. printing master plate having graft copolymer interlayer on support)

L20 ANSWER 8 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:871271 HCAPLUS

DOCUMENT NUMBER: 141:372783

TITLE: Positive-working lithographic printing master plate having lactone-based polymer interlayer on support

INVENTOR(S): Tashiro, Hiroshi; Takahashi, Miki; Hotta, Hisashi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004294909	A2	20041021	JP 2003-89095	2003 0327

PRIORITY APPLN. INFO.: JP 2003-89095  
 2003  
 0327

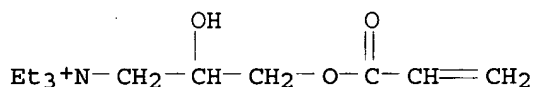
AB Disclosed is the pos.-working lithog. printing master comprising on a support an interlayer made from a lactone-based polymer, a water-soluble lower layer containing an alkali-soluble resin, and a water-soluble upper **heat-sensitive** layer containing an alkali-soluble resin and an IR-absorbing dye in the order. The use of the interlayer provided excellent sensitivity, development latitude, and printing durability.

IT 777947-84-9  
 (pos.-working lithog. printing master plate having lactone-based polymer interlayer on support)

RN 777947-84-9 HCAPLUS  
 CN 1-Propanaminium, N,N,N-triethyl-2-hydroxy-3-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with 4-ethenylbenzoic acid and tetrahydro-4,4-dimethyl-2-oxo-3-furanyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

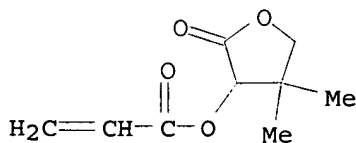
CRN 777947-83-8  
 CMF C12 H24 N O3 .. Cl



● Cl<sup>-</sup>

CM 2

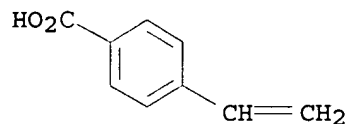
CRN 84822-49-1  
 CMF C9 H12 O4



CM 3

CRN 1075-49-6

CMF C9 H8 O2



IT 669013-38-1P,  $\alpha$ -Methacryloyloxy- $\gamma$ -butyrolactone-p-vinylbenzoic acid copolymer  
(pos.-working lithog. printing master plate having  
lactone-based polymer interlayer on support)

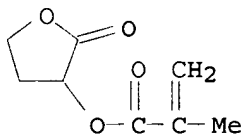
RN 669013-38-1 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with tetrahydro-2-oxo-3-furanyl  
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 195000-66-9

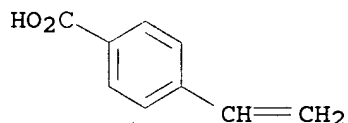
CMF C8 H10 O4



CM 2

CRN 1075-49-6

CMF C9 H8 O2



IC ICM G03F007-11

ICS G03F007-00; G03F007-004

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)

Section cross-reference(s): 35, 38

IT 777947-84-9

(pos.-working lithog. printing master plate having  
lactone-based polymer interlayer on support)

IT 669013-38-1P,  $\alpha$ -Methacryloyloxy- $\gamma$ -butyrolactone-p-vinylbenzoic acid copolymer

(pos.-working lithog. printing master plate having  
lactone-based polymer interlayer on support)

L20 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:801659 HCAPLUS

DOCUMENT NUMBER: 141:304335

TITLE: Original plate of lithographic printing plate

INVENTOR(S): Aogo, Toshiaki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004272058	A2	20040930	JP 2003-64761	2003 0311

PRIORITY APPLN. INFO.:

JP 2003-64761

2003  
0311

OTHER SOURCE(S): MARPAT 141:304335

AB The invention is concerned about an original plate for making IR laser pos. lithog. printing plate using direct plate-making method. The plate comprises, on a support having a hydrophilic surface, a **heat-sensitive** layer containing (A) a water-insol. alkali soluble resin, (B) an IR-absorbing dye, and (C) a cyclodextrin derivative. The **heat-sensitive** layer has an increased solubility in aqueous alkali solution upon IR exposure.

IT 220227-02-1

(substrate surface coating; original plate of lithog. printing plate containing cyclodextrin derivs.)

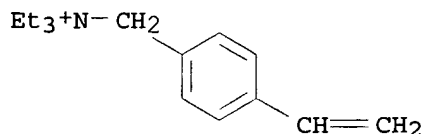
RN 220227-02-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

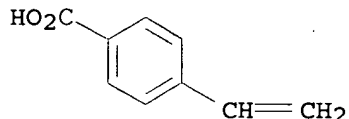
CRN 14350-43-7

CMF C15 H24 N . Cl



● Cl<sup>-</sup>

CM 2

CRN 1075-49-6  
CMF C9 H8 O2

IC ICM G03F007-004  
ICS G03F007-00; G03F007-11  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
IT 220227-02-1  
(substrate surface coating; original plate of lithog. printing plate containing cyclodextrin derivs.)

L20 ANSWER 10 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2004:779269 HCAPLUS  
DOCUMENT NUMBER: 141:285849  
TITLE: IR-sensitive direct-imaging lithographic printing plate **precursors**  
INVENTOR(S): Nagashima, Akira  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004264747	A2	20040924	JP 2003-57123	2003 0304
CN 1527137	A	20040908	CN 2003-10114267	2003 1112
PRIORITY APPLN. INFO.:			JP 2003-57123	A 2003 0304

AB The title printing plate **precursor** has an olefinic resin, a novolak resin, and a light-to-heat converting compound on a hydrophilized support, wherein the olefinic resin is a copolymer of  $H_2C=C(-R_1)(-X-COOH)$  ( $R_1 = H, \text{ alkyl}; X = \text{arylene}, -CO-Y-, -OCO-Y-, -Ar-Y-; Y = 2\text{-valent connecting group}; Ar = \text{arylene}$ ) and (meth)acrylate, a (meth)acrylamide derivative, or a styrene derivative and wherein the surface of the support is electrochem. roughened in acidic solution mainly containing hydrogen chloride. The printing plate **precursor** shows wide development latitude and provides printing plate of high printing durability.

IT 604813-23-2  
(IR-sensitive direct-imaging lithog. printing plate



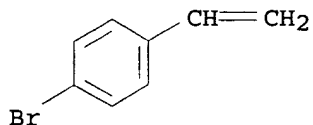
**precursors)**

RN 604813-23-2 HCAPLUS  
 CN Benzoic acid, 4-ethenyl-, polymer with 1-bromo-4-ethenylbenzene  
 and N-(1,1-dimethylethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 2039-82-9

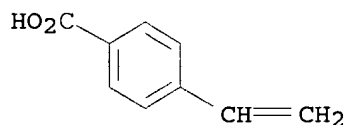
CMF C8 H7 Br



CM 2

CRN 1075-49-6

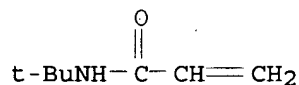
CMF C9 H8 O2



CM 3

CRN 107-58-4

CMF C7 H13 N O



IC ICM G03F007-033  
 ICS B41N001-08; B41N003-03; G03F007-004; G03F007-09  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and  
 Other Reprographic Processes)  
 Section cross-reference(s): 35  
 ST IR lithog printing plate **precursor** support resin  
 IT Lithographic plates  
 (IR-sensitive direct-imaging lithog. printing plate  
**precursors**)  
 IT Phenolic resins, uses  
 (novolak; IR-sensitive direct-imaging lithog. printing plate  
**precursors**)  
 IT 7647-01-0, Hydrogen chloride, processes 27029-76-1  
 (IR-sensitive direct-imaging lithog. printing plate  
**precursors**)  
 IT 604813-23-2 604813-56-1 604813-57-2 604813-62-9

604813-64-1 604813-65-2 604813-66-3 760965-90-0  
(IR-sensitive direct-imaging lithog. printing plate  
precursors)  
IT 1344-09-8, Sodium silicate  
(hydrophilizing agent; IR-sensitive direct-imaging lithog.  
printing plate precursors)  
IT 37321-70-3, JIS A1050  
(support; IR-sensitive direct-imaging lithog. printing plate  
precursors)

L20 ANSWER 11 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:612321 HCAPLUS

DOCUMENT NUMBER: 141:148156

TITLE: Method for making lithographic printing plates  
by direct IR-imaging process

INVENTOR(S): Kawauchi, Ikuo; Nagase, Hiroyuki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004212649	A2	20040729	JP 2002-382229	2002 1227

PRIORITY APPLN. INFO.: JP 2002-382229

2002  
1227

AB The title method includes the steps of: imagewise exposing a  
printing plate precursor having an image-forming layer  
on a support; and developing the image with an alkali developer,  
wherein the image-forming layer contains a copolymer of  
 $\text{CH}_2=\text{C}(\text{R})(-\text{X}-\text{COOH})$  ( $\text{R} = \text{H}$ , alkyl;  $\text{X} = \text{arylene}$ ) and wherein the  
developer contains an anionic surfactant having sulfonium groups.  
The method uses decreased exposure energy and generates little  
residue film in the development.

IT 188601-29-8P 604813-16-3P 604813-18-5P  
604813-19-6P 604813-23-2P

(copolymer; light-sensitive layer of lithog. printing  
plate precursors)

RN 188601-29-8 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with ethenylmethylbenzene (9CI)  
(CA INDEX NAME)

CM 1

CRN 25013-15-4

CMF C9 H10

CCI IDS



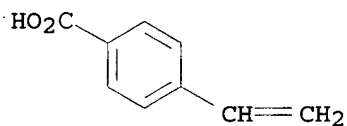
D1- Me

D1- CH=CH<sub>2</sub>

CM 2

CRN 1075-49-6

CMF C9 H8 O2



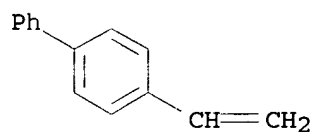
RN 604813-16-3 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with 4-ethenyl-1,1'-biphenyl  
(9CI) (CA INDEX NAME)

CM 1

CRN 2350-89-2

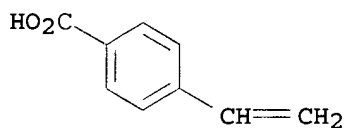
CMF C14 H12



CM 2

CRN 1075-49-6

CMF C9 H8 O2



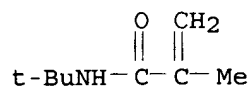
RN 604813-18-5 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with N-(1,1-dimethylethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 6554-73-0

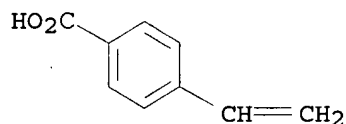
CMF C8 H15 N O



CM 2

CRN 1075-49-6

CMF C9 H8 O2



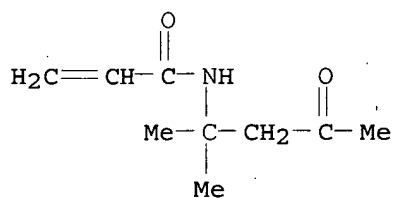
RN 604813-19-6 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with N-(1,1-dimethyl-3-oxobutyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 2873-97-4

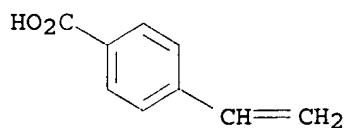
CMF C9 H15 N O2



CM 2

CRN 1075-49-6

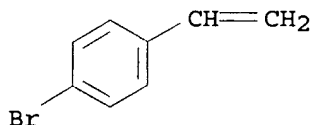
CMF C9 H8 O2



RN 604813-23-2 HCAPLUS  
 CN Benzoic acid, 4-ethenyl-, polymer with 1-bromo-4-ethenylbenzene  
 and N-(1,1-dimethylethyl)-2-propenamide (9CI) (CA INDEX NAME)

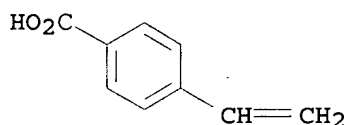
CM 1

CRN 2039-82-9  
 CMF C8 H7 Br



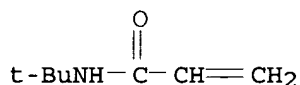
CM 2

CRN 1075-49-6  
 CMF C9 H8 O2



CM 3

CRN 107-58-4  
 CMF C7 H13 N O



IC ICM G03F007-00  
 ICS G03F007-033; G03F007-32  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and  
 Other Reprographic Processes)  
 Section cross-reference(s): 35, 46  
 IT 146115-88-0P 188601-29-8P 604813-16-3P  
 604813-18-5P 604813-19-6P 604813-23-2P  
 604813-38-9P 604813-40-3P 604813-41-4P 604813-42-5P  
 604813-43-6P 604813-44-7P 604813-45-8P 604813-46-9P  
 604813-47-0P 604813-48-1P 604813-50-5P 604813-52-7P  
 604813-54-9P 604813-55-0P 604813-56-1P 604813-57-2P  
 604813-59-4P 604813-60-7P 604813-61-8P 604813-62-9P  
 604813-64-1P 604813-65-2P 604813-66-3P 604813-67-4P  
 722484-52-8P 722494-08-8P 722494-09-9P  
 (copolymer; light-sensitive layer of lithog. printing  
 plate precursors)

L20 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2004:569739 HCAPLUS  
 DOCUMENT NUMBER: 141:131306  
 TITLE: Infrared-sensitive lithographic printing plate  
 INVENTOR(S): Kawauchi, Ikuo; Nakamura, Ippei  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: U.S. Pat. Appl. Publ., 25 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004137365	A1	20040715	US 2003-743412	2003 1223
JP 2004212650	A2	20040729	JP 2002-382230	2002 1227
EP 1433595	A2	20040630	EP 2003-29286	2003 1222
R: AT, BE, GB, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PT, RO, SE, SI, SK, TR				
CN 1512268	A	20040714	CN 2003-10113198	2003 1226
PRIORITY APPLN. INFO.:			JP 2002-382230	A 2002 1227

AB There is provided an IR-sensitive lithog. printing plate capable of direct plate-making based on digital data from a computer or the like, and excellent in development latitude and scratch resistance, which is an IR-sensitive lithog. printing plate comprising a support and a **heat-sensitive** layer, the **heat-sensitive** layer comprising (A) a copolymer having a specific monomer unit having a carboxyl group, (B) an alkali-soluble high mol. weight compound having a sulfonamide group, and (C) a light-heat conversion material.

IT 188601-29-8 604813-16-3 604813-18-5  
 604813-19-6 604813-23-2

(IR-sensitive lithog. printing plate containing)

RN 188601-29-8 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with ethenylmethylbenzene (9CI)  
 (CA INDEX NAME)

CM 1

CRN 25013-15-4

CMF C9 H10

CCI IDS



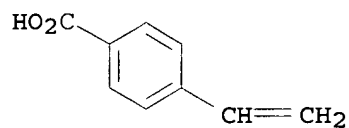
D1- Me

D1- CH=CH<sub>2</sub>

CM 2

CRN 1075-49-6

CMF C9 H8 O2



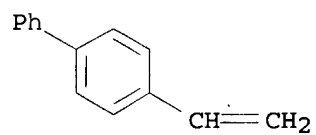
RN 604813-16-3 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with 4-ethenyl-1,1'-biphenyl  
(9CI) (CA INDEX NAME)

CM 1

CRN 2350-89-2

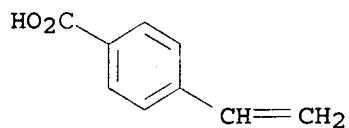
CMF C14 H12



CM 2

CRN 1075-49-6

CMF C9 H8 O2

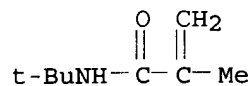


RN 604813-18-5 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with N-(1,1-dimethylethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

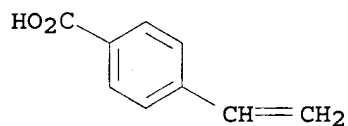
CM 1

CRN 6554-73-0  
CMF C8 H15 N O



CM 2

CRN 1075-49-6  
CMF C9 H8 O2

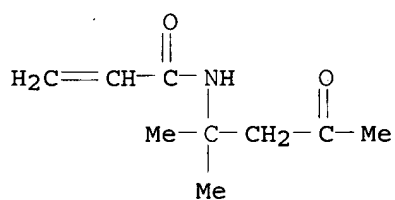


RN 604813-19-6 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with N-(1,1-dimethyl-3-oxobutyl)-2-propenamide (9CI) (CA INDEX NAME)

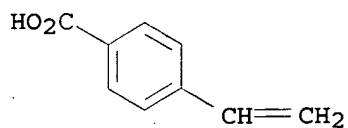
CM 1

CRN 2873-97-4  
CMF C9 H15 N O2



CM 2

CRN 1075-49-6  
CMF C9 H8 O2

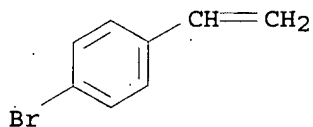




RN 604813-23-2 HCAPLUS  
 CN Benzoic acid, 4-ethenyl-, polymer with 1-bromo-4-ethenylbenzene  
 and N-(1,1-dimethylethyl)-2-propenamide (9CI) (CA INDEX NAME)

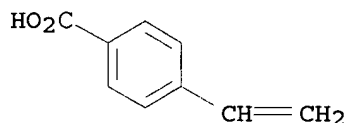
CM 1

CRN 2039-82-9  
 CMF C8 H7 Br



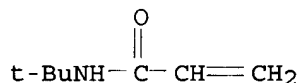
CM 2

CRN 1075-49-6  
 CMF C9 H8 O2



CM 3

CRN 107-58-4  
 CMF C7 H13 N O



IC ICM G03F007-039  
 INCL 430270100; 430286100; 430302000; 101453000  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and  
 Other Reprographic Processes)  
 Section cross-reference(s): 38  
 IT 146115-88-0 188601-29-8 604813-16-3  
 604813-18-5 604813-19-6 604813-23-2  
 604813-38-9 604813-40-3 604813-41-4 604813-42-5  
 604813-43-6 604813-44-7 604813-45-8 604813-46-9  
 604813-47-0 604813-48-1 604813-50-5 604813-52-7  
 604813-54-9 604813-55-0 604813-56-1 604813-57-2  
 604813-59-4 604813-60-7 604813-61-8 604813-62-9  
 604813-64-1 604813-65-2 604813-66-3 604813-67-4  
 722484-52-8 722494-08-8 722494-09-9  
 (IR-sensitive lithog. printing plate containing)

L20 ANSWER 13 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2004:305152 HCAPLUS  
 DOCUMENT NUMBER: 140:347531  
 TITLE: Photosensitive lithographic printing plate  
**precursor**  
 INVENTOR(S): Kondo, Shunichi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 33 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1407894	A2	20040414	EP 2003-22901	2003 1009
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004133125	A2	20040430	JP 2002-296404	2002 1009
PRIORITY APPLN. INFO.:			JP 2002-296404	A 2002 1009

AB A photosensitive lithog. printing plate **precursor** comprises an aluminum support having provided thereon an intermediate layer and a photopolymerizable photosensitive layer in this order, wherein the intermediate layer comprises a copolymer containing a constituting component having an acid group and a constituting component capable of reacting with an alkali developing solution to increase the dissoln. rate in the alkali developing solution. The object of the invention is to provide a photosensitive lithog. printing plate which has a high preservation stability and is prevented from the occurrence of background stain by conducting imagewise exposure, development and printing even after the preservation under high temperature and high humidity conditions for a long period of time after the production

IT 679796-25-9  
 (photosensitive lithog. printing plate  
**precursor**)

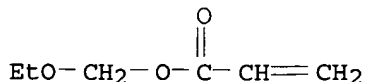
RN 679796-25-9 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with ethoxymethyl 2-propenoate  
 (9CI) (CA INDEX NAME)

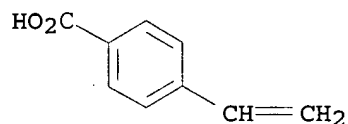
CM 1

CRN 101181-06-0

CMF C6 H10 O3



CM 2

CRN 1075-49-6  
CMF C9 H8 O2

IC ICM B41N003-03  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 ST photosensitive lithog printing plate **precursor**  
 IT Lithographic plates  
 (photosensitive lithog. printing plate **precursor**)  
 IT 3524-68-3 51821-72-8, Isobutyl methacrylate-methacrylic acid-methyl methacrylate copolymer 80937-22-0 90216-38-9, Allyl methacrylate-methacrylic acid copolymer 161255-05-6, Isopropylacrylamide-methacrylic acid-methyl methacrylate copolymer 293329-29-0 461660-75-3 485385-86-2 **679796-25-9**  
 (photosensitive lithog. printing plate **precursor**)

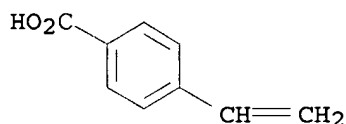
L20 ANSWER 14 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2004:291555 HCAPLUS  
 DOCUMENT NUMBER: 140:329560  
 TITLE: Method of plate-making positive-working lithographic printing plate  
 INVENTOR(S): Aogo, Toshiaki; Onishi, Hiroaki  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004109442	A2	20040408	JP 2002-271435	2002 0918
PRIORITY APPLN. INFO.:			JP 2002-271435	2002 0918

AB The pos.-working lithog. printing master plate contains an IR absorbing dye and a water-insol. and alkali-soluble resin in a **heat-sensitive** layer on a water-insol. resin- and alkali-soluble resin-based subbing layer formed on the hydrophilic surface of support, in which the solubility of the **heat sensitive** layer in an alkali aqueous solution increases upon receiving an IR irradiation The pos.-working lithog.

printing master plate receives an IR imagewise exposure, and is developed using an alkali developer which contains  $\geq 1$  water-soluble polymer compound having sulfonic acid group, carboxylic acid group, phosphonic acid group, and /or salt thereof, a buffer compound, and a base compound

IT 28391-39-1  
 (developer for plate-making of pos.-working lithog.  
 printing plate)  
 RN 28391-39-1 HCAPLUS  
 CN Benzoic acid, 4-ethenyl-, homopolymer (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 1075-49-6  
 CMF C9 H8 O2

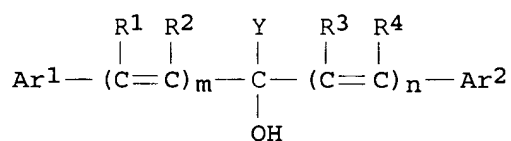


IC ICM G03F007-32  
 ICS G03F007-00; G03F007-004  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and  
 Other Reprographic Processes)  
 Section cross-reference(s): 38  
 IT 25087-26-7, Methacrylic acid homopolymer 25300-64-5, Maleic  
 acid-styrene copolymer 27754-99-0 28391-39-1  
 54640-82-3 83328-59-0  
 (developer for plate-making of pos.-working lithog.  
 printing plate)

L20 ANSWER 15 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2004:260987 HCAPLUS  
 DOCUMENT NUMBER: 140:294816  
 TITLE: Infrared sensitive composition and  
 lithographic printing plate precursor  
 INVENTOR(S): Endo, Akihiro  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 26 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1403039	A1	20040331	EP 2003-20590	2003 0918
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004125851	A2	20040422	JP 2002-285697	2002

US 2004063029 A1 20040401 US 2003-673450 0930  
 2003  
 0930  
 CN 1497346 A 20040519 CN 2003-135972 2003  
 0930  
 PRIORITY APPLN. INFO.: JP 2002-285697 A 2002  
 0930  
 OTHER SOURCE(S): MARPAT 140:294816  
 GI



AB An IR sensitive composition and a lithog. printing plate **precursor** having a large difference in alkali solubility between the exposed portions and unexposed portions (dissoln. discrimination), an excellent latitude in development, and a high sensitivity can be provided when the composition is used for the image-forming layer of a lithog. printing plate **precursor**, which is an IR sensitive composition comprising an alkali-soluble resin having a phenolic hydroxyl group (A), a light-heat converting substance (B) and a leucohydroxy dye (C). The leucohydroxy dye is represented by the general formula I (Ar<sup>1</sup>, Ar<sup>2</sup> = aryl, heteroaryl; R<sup>1</sup>-R<sup>4</sup> = H, alkyl; Y = H, alkyl, aryl, heteroaryl; at least one of Ar<sup>1</sup>, Ar<sup>2</sup> and Y has as a substituent a hydroxy group, an amino group, a monoalkylamino group or a dialkylamino group at the ortho or para position; two of Ar<sup>1</sup>, Ar<sup>2</sup> and Y may link together to form a ring; m, n = 0 or 1).

IT 220227-02-1

(IR sensitive composition and lithog. printing plate **precursor**)

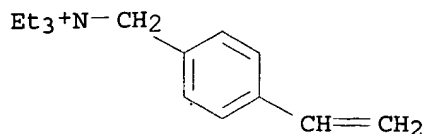
RN 220227-02-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 14350-43-7

CMF C15 H24 N . Cl

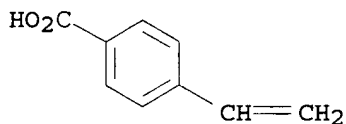


● Cl<sup>-</sup>

CM 2

CRN 1075-49-6

CMF C9 H8 O2



IC ICM B41C001-10

ICS G03F007-004; G03C001-73

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST lithog printing plate **precursor** IR sensitive compn

IT Lithographic plates

(IR sensitive composition and lithog. printing plate **precursor**)

IT 467-63-0 510-13-4 603-48-5 6948-88-5 23705-78-4

103250-84-6, m-Cresol-p-cresol-phenol copolymer

220227-02-1 676259-57-7

(IR sensitive composition and **lithog.** printing plate **precursor**)

REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:671500 HCAPLUS

DOCUMENT NUMBER: 139:188366

TITLE: Positive-working **heat sensitive** lithography printing plate with high development latitude

INVENTOR(S): Watanabe, Noriaki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

JP 2003241388

A2

20030827

JP 2002-43565

2002  
0220

US 2003183106

A1

20031002

US 2003-364400

2003  
0212

US 6849380

B2

20050201

JP 2002-43565

A

2002  
0220

PRIORITY APPLN. INFO.:

AB Title printing plate is obtained by laminating an aluminum substrate, which has been subjected to anode oxidative treatment, an undercoat comprising polymer having acid group-containing components and onium group-containing components, a middle layer comprising a resin which is water-insol. but soluble in alkali, and a **heat-sensitive** layer which comprises a water-insol. but alkali-soluble resin and an IR-absorbing dye and becomes more soluble in aqueous alkali upon heating.

IT 220227-02-1 252721-97-4 252721-98-5

(undercoat; pos.-working **heat sensitive****lithog.** printing plate with high development latitude)

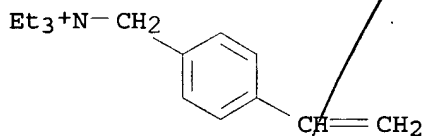
RN 220227-02-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 14350-43-7

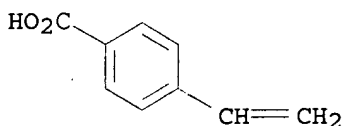
CMF C15 H24 N . Cl

● Cl<sup>-</sup>

CM 2

CRN 1075-49-6

CMF C9 H8 O2

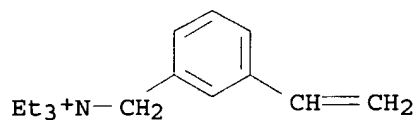


RN 252721-97-4 HCAPLUS  
CN Benzenemethanaminium, 3-ethenyl-N,N,N-triethyl-, chloride, polymer  
with 4-ethenylbenzoic acid and 4-ethenyl-N,N,N-  
triethylbenzenemethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 91277-26-8

CMF C15 H24 N . Cl

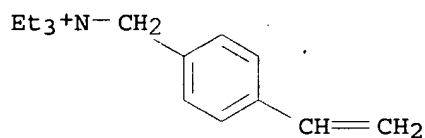


●  $\text{Cl}^-$

CM 2

CRN 14350-43-7

CMF C15 H24 N . Cl

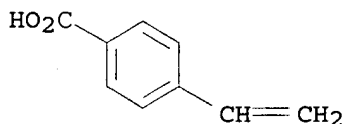


●  $\text{Cl}^-$

CM 3

CRN 1075-49-6

CMF C9 H8 O2

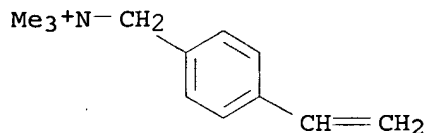


RN 252721-98-5 HCAPLUS  
CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride,  
polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

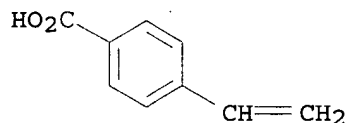


CRN 7538-38-7  
CMF C12 H18 N . Cl



CM 2

CRN 1075-49-6  
CMF C9 H8 O2



- IC ICM G03F007-11  
ICS B41N001-14; G03F007-00; G03F007-004; G03F007-039
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST pos working **heat sensitive** lithog printing plate
- IT Phenolic resins, uses  
(novolak, middle layer and **heat-sensitive** layer; pos.-working **heat sensitive** lithog. printing plate with high development latitude)
- IT Lithographic plates  
(planog.; pos.-working **heat sensitive** lithog. printing plate with high development latitude)
- IT 134127-48-3  
(IR-absorbing dye; pos.-working **heat sensitive** lithog. printing plate with high development latitude)
- IT 7429-90-5, Aluminum, uses  
(alloy; pos.-working **heat sensitive** lithog. printing plate with high development latitude)
- IT 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer  
(middle layer and **heat-sensitive** layer; pos.-working **heat sensitive** lithog. printing plate with high development latitude)
- IT 141634-00-6  
(middle layer; pos.-working **heat sensitive** lithog. printing plate with high development latitude)
- IT 220227-02-1 252721-97-4 252721-98-5  
(undercoat; pos.-working **heat sensitive**

## lithog. printing plate with high development latitude)

L20 ANSWER 17 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:299303 HCAPLUS

DOCUMENT NUMBER: 138:329007

TITLE: Presensitized lithography plates for IR laser  
direct platemaking with suppressed scum

INVENTOR(S): Kawauchi, Ikuo

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003114519	A2	20030418	JP 2001-309942	2001 1005

## PRIORITY APPLN. INFO.:

JP 2001-309942

2001  
1005

AB The lithog. plate has a **heat-sensitive** layer containing (A) photothermal converters, (B) aqueous alkali-soluble resins bearing phenolic OH, and (C) waxes which suppress scum on developing, represented by compds. bearing 1-6 groups represented by general formula  $R_1YCOXR_2$  ( $X = O, S, NR_3$ ;  $Y = NR_3$ , single bond;  $R_1 = C_1-32$  alkylene, arylene;  $R_2, R_3 = H, C_1-18$  alkyl, alkenyl, aryl;  $R_1$  and/or  $R_2$  may bear OH,  $CO_2H$ ,  $SO_3H$ , sulfinic acid group,  $PO_3H_2$ , phosphonic acid group).

IT 216861-97-1

(undercoat; presensitized lithog. plates with wax-containing **heat-sensitive** layer for IR laser direct platemaking with suppressed scum)

RN 216861-97-1 HCAPLUS

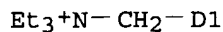
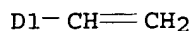
CN Benzenemethanaminium, ar-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 51241-16-8

CMF C15 H24 N . Cl

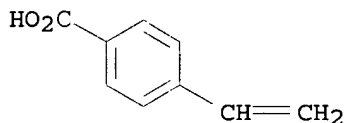
CCI IDS



CM 2

CRN 1075-49-6

CMF C9 H8 O2



- IC ICM G03F007-00  
ICS C09K003-00; G03F007-004
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 38
- ST lithog plate IR laser direct platemaking; wax novolak **heat sensitive** layer lithog; presensitized lithog plate **heat sensitive** layer wax; pos IR laser lithog plate master
- IT Polyurethanes, uses  
(acrylic, fluorine-containing; presensitized lithog. plates with wax-containing **heat-sensitive** layer for IR laser direct platemaking with suppressed scum)
- IT Fluoropolymers, uses  
(acrylic-polyurethane-; presensitized lithog. plates with wax-containing **heat-sensitive** layer for IR laser direct platemaking with suppressed scum)
- IT Phenolic resins, uses  
(novolak, **heat-sensitive** layer binder; presensitized lithog. plates with wax-containing **heat-sensitive** layer for IR laser direct platemaking with suppressed scum)
- IT Cyanine dyes  
(photothermal converter; presensitized lithog. plates with wax-containing **heat-sensitive** layer for IR laser direct platemaking with suppressed scum)
- IT Acrylic polymers, uses

- (polyoxyalkylene-, fluorine-containing, graft; presensitized lithog. plates with wax-containing **heat-sensitive** layer for IR laser direct platemaking with suppressed scum)
- IT Lithographic plates  
(presensitized; presensitized lithog. plates with wax-containing **heat-sensitive** layer for IR laser direct platemaking with suppressed scum)
- IT 63-74-1, p-Aminobenzenesulfonamide 79-41-4, Methacrylic acid, reactions  
(monomer preparation from; presensitized lithog. plates with wax-containing **heat-sensitive** layer for IR laser direct platemaking with suppressed scum)
- IT 56992-87-1P, N-(p-Aminosulfonylphenyl)methacrylamide  
(monomer; presensitized lithog. plates with wax-containing **heat-sensitive** layer for IR laser direct platemaking with suppressed scum)
- IT 134127-48-3  
(photothermal converter; presensitized lithog. plates with wax-containing **heat-sensitive** layer for IR laser direct platemaking with suppressed scum)
- IT 124996-93-6P, Acrylonitrile-(p-aminosulfonylphenyl)methacrylamide-ethyl methacrylate copolymer  
(presensitized lithog. plates with wax-containing **heat-sensitive** layer for IR laser direct platemaking with suppressed scum)
- IT 83563-92-2 92739-54-3 451462-65-0 511531-81-0 511531-82-1  
511531-83-2 511531-84-3 511531-85-4 511531-86-5  
511531-87-6 511531-88-7 511531-89-8 511531-90-1  
511531-91-2 511531-92-3 511531-93-4 511531-94-5  
511531-96-7  
(presensitized lithog. plates with wax-containing **heat-sensitive** layer for IR laser direct platemaking with suppressed scum)
- IT 216861-97-1  
(undercoat; presensitized lithog. plates with wax-containing **heat-sensitive** layer for IR laser direct platemaking with suppressed scum)

L20 ANSWER 18 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:429453 HCAPLUS

DOCUMENT NUMBER: 137:26109

TITLE: Lithographic printing plate **precursor**

INVENTOR(S): Oohashi, Hidekazu; Shimada, Kazuto

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: U.S. Pat. Appl. Publ., 76 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

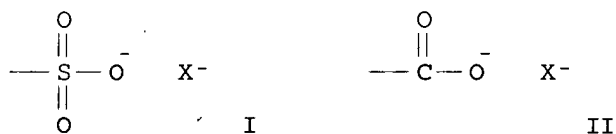
FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2002068241	A1	20020606	US 2001-964611	2001 0928
US 6824946	B2	20041130		
JP 2002107929	A2	20020410	JP 2000-303953	2000

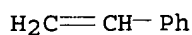
JP 2002144750	A2	20020522	JP 2000-349715	1003
				2000
				1116
JP 2002174895	A2	20020621	JP 2000-374529	2000
				1208
JP 2002174893	A2	20020621	JP 2000-374530	2000
				1208
US 2004086799	A1	20040506	US 2003-727633	2003
				1205
US 6939658	B2	20050906		
PRIORITY APPLN. INFO.:			JP 2000-303953	A
				2000
				1003
			JP 2000-349715	A
				2000
				1116
			JP 2000-374529	A
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			JP 2000-374530	A
				2000
				1208
			US 2001-964611	A3
				2001
				0928

GI

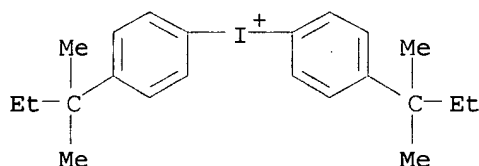


AB A lithog. printing plate **precursor** comprises a support having a hydrophilic surface having provided thereon an image-forming layer containing a hydrophobic high mol. compound having at least either a functional group represented by the formula I or a functional group represented by the formula II (X<sup>+</sup> = iodonium, sulfonium, or diazonium ions). The present invention provides a lithog. printing plate **precursor** which has high sensitivity and causes no stains due to residual films, and is capable of plate-making by scanning exposure with a solid state laser and a semiconductor laser emitting IR rays based on digital signals. The present invention also provides a lithog. printing plate **precursor** which can be developed by water or an aqueous solution, or can be mounted on a printing machine to perform

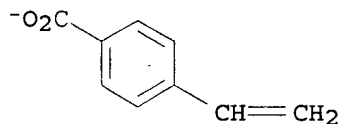
printing requiring no development.  
 IT 433922-49-7  
 (lithog. printing plate precursor)  
 RN 433922-49-7 HCAPLUS  
 CN Iodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, salt with  
 4-ethenylbenzoic acid (1:1), polymer with ethenylbenzene (9CI)  
 (CA INDEX NAME)  
 CM 1  
 CRN 100-42-5  
 CMF C8 H8



CM 2  
 CRN 433922-48-6  
 CMF C22 H30 I . C9 H7 O2  
 CM 3  
 CRN 249300-51-4  
 CMF C22 H30 I



CM 4  
 CRN 74056-33-0  
 CMF C9 H7 O2



IC ICM G03F007-021  
 ICS G03F007-28; G03F007-033; G03F007-038; B41N001-12  
 INCL 430288100  
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and  
 Other Reprographic Processes)  
 Section cross-reference(s): 38  
 ST lithog printing plate precursor IR laser exposable  
 IT Lithographic plates  
 (lithog. printing plate precursor)

IT 134127-48-3 289893-03-4 361542-00-9 427883-12-3  
 427898-71-3  
 (IR-absorber dye; lithog. printing plate precursor)  
 IT 496-16-2 52858-60-3 56992-88-2 57758-90-4 150610-19-8  
 215958-19-3 427883-14-5 427883-16-7 433922-47-5  
 433922-49-7 433922-51-1 433922-54-4 433922-55-5  
 433922-56-6

(lithog. printing plate precursor)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L20 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:286047 HCAPLUS

DOCUMENT NUMBER: 136:316957

TITLE: Lithographic printing plate precursor  
 having hydrophilic layer and recording layer  
 containing polymer of heat-  
 sensitive carboxyl groups

INVENTOR(S): Takahashi, Miki; Yamazaki, Sumiaki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 2002113964	A2	20020416	JP 2000-309357	2000 1010
PRIORITY APPLN. INFO.: JP 2000-309357				2000 1010

AB The title lithog. printing plate precursor has a hydrophilic layer and a recording layer on a support, wherein the recording layer contains a polymer having a carboxylic acid group or a carboxylate group to be decomposed by heat and wherein the hydrophilic layer is connected to the support by covalent bonds and contains a polymer having hydrophilic groups. The printing plate precursor shows the good contact of printing layer with the support, the reduced heat diffusion in the aluminum support to write images with the low energy and provides the printing plate of little soiling and the good printing durability.

IT 265316-27-6 265316-79-8

(polymer in recording layer of lithog. printing plate precursor)

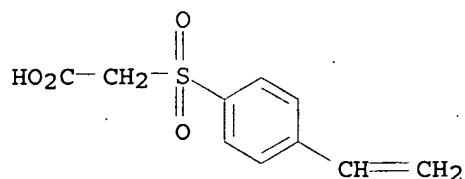
RN 265316-27-6 HCAPLUS

CN Acetic acid, [(4-ethenylphenyl)sulfonyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 103945-08-0

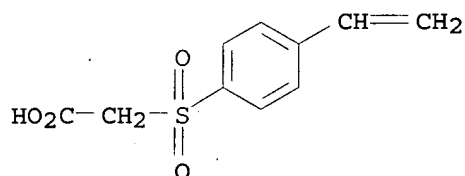
CMF C10 H10 O4 S



RN 265316-79-8 HCAPLUS  
 CN Acetic acid, [(4-ethenylphenyl)sulfonyl]-, sodium salt,  
 homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 265316-78-7  
 CMF C10 H10 O4 S . Na



● Na

IC ICM B41N001-14  
 ICS G03F007-00; G03F007-004; G03F007-039; G03F007-11  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and  
 Other Reprographic Processes)  
 Section cross-reference(s): 35  
 ST lithog printing plate **precursor** hydrophilic layer  
 recording polymer  
 IT Lithographic plates  
 (lithog. printing plate **precursor** having hydrophilic  
 layer and recording layer containing polymer of **heat-**  
**sensitive** carboxylic groups on support)  
 IT 9003-01-4DP, Acrylic acid homopolymer, reaction product with  
 2-(Methacryloyloxy)ethyl isocyanate 30674-80-7DP,  
 2-(Methacryloyloxy)ethyl isocyanate, reaction product with acrylic  
 polymer 141087-50-5P, Tetraethoxysilane-(3-  
 Methacryloxypropyl)trimethoxysilane copolymer  
 (hydrophilic layer of lithog. printing plate **precursor**  
 )  
 IT 265316-27-6 265316-42-5 265316-79-8  
 265316-94-7 265317-16-6 265317-22-4  
 (polymer in recording layer of lithog. printing plate  
**precursor**)

L20 ANSWER 20 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2002:265350 HCAPLUS  
 DOCUMENT NUMBER: 136:316944  
 TITLE: Lithographic plate **precursors** for



INVENTOR(S): scanning exposure by IR laser  
 Ohashi, Hidekazu  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002107929	A2	20020410	JP 2000-303953	2000 1003
US 2002068241	A1	20020606	US 2001-964611	2001 0928
US 6824946	B2	20041130		
US 2004086799	A1	20040506	US 2003-727633	2003 1205
US 6939658	B2	20050906		
PRIORITY APPLN. INFO.:			JP 2000-303953	A 2000 1003
			JP 2000-349715	A 2000 1116
			JP 2000-374529	A 2000 1208
			JP 2000-374530	A 2000 1208
			US 2001-964611	A3 2001 0928

AB The title lithog. plate has an image-forming layer containing a hydrophobic polymer on a support with a hydrophilic surface, wherein the hydrophobic polymer has functional group -S(=O)<sub>2</sub>-X<sup>+</sup> and -C(=O)O-X<sup>+</sup> (X<sup>+</sup> = iodonium, sulfonium, diazonium). The lithog. plate precursor shows the high sensitivity and provides printing plates of little soiling caused by residual light-sensitive layers during the plate making.

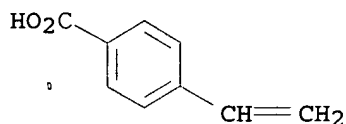
IT 28854-56-0P  
 (hydrophobic polymer in lithog. plate precursors)

RN 28854-56-0 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1075-49-6  
CMF C9 H8 O2



CM 2

CRN 100-42-5  
CMF C8 H8

$\text{H}_2\text{C}=\text{CH}-\text{Ph}$

IC ICM G03F007-038  
ICS B41N001-14; G03F007-00  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 35  
ST lithog plate **precursor** scanning exposure IR laser  
IT Light-sensitive materials  
Lithographic plates  
(lithog. plate **precursors** for scanning exposure by IR laser)  
IT 75-03-6, Ethyl iodide 945-51-7, Diphenyl sulfoxide 2049-95-8, tert-Amylbenzene 7758-05-6, Potassium iodate 12027-06-4, Ammonium iodide 16600-92-3, 2-Nitro-1,3,5-benzenetriol (hydrophobic polymer in lithog. plate **precursors**)  
IT 3744-08-9P, Triphenylsulfonium iodide 215253-66-0P, Benzenediazonium, 2,4,6-triethoxy- 220476-27-7P, 2-Nitro-1,3,5-triethoxybenzene 220476-28-8P, 2,4,6-Triethoxyaniline hydrochloride 365971-60-4P, Iodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, iodide (hydrophobic polymer in lithog. plate **precursors**)  
IT 25085-34-1P 27234-22-6P **28854-56-0P** 259263-07-5DP, Styrene-Cyclohexyl p-styrenesulfonate copolymer, hydrolyzed, salt with iodonium, sulfonium, or diazonium 264871-12-7P 409350-26-1P (hydrophobic polymer in lithog. plate **precursors**)

L20 ANSWER 21 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2002:219919 HCAPLUS  
DOCUMENT NUMBER: 136:239137  
TITLE: Thermal positive-type lithographic plate using anodized aluminum support  
INVENTOR(S): Endo, Tadashi  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002082443	A2	20020322	JP 2000-272895	2000 0908

PRIORITY APPLN. INFO.:

JP 2000-272895

2000  
0908

AB In the material comprising a coarsened and anodized Al support coated with a photosensitive layer whose solubility to an alkaline developer changes by heating, the anodized film has micropores with average size  $\leq 20$  nm and d.  $\geq 300$  number/ $\mu\text{m}^2$ . The material shows high sensitivity.

IT **214279-68-2P**, p-Vinylbenzoic acid-vinylbenzyltrimethylammonium chloride copolymer  
**220227-02-1P**, Triethyl(p-vinylbenzyl)ammonium chloride-p-vinylbenzoic acid copolymer **252721-97-4P**, Triethyl(m-vinylbenzyl)ammonium chloride-triethyl(p-vinylbenzyl)ammonium chloride-p-vinylbenzoic acid copolymer (intermediate layer; **heat-sensitive lithog.** plate using anodized aluminum support with size-controlled micropores)

RN 214279-68-2 HCAPLUS

CN Benzenemethanaminium, ar-ethenyl-N,N,N-trimethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 26616-35-3

CMF C12 H18 N . Cl

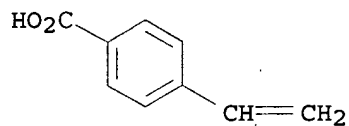
CCI IDS

D1-CH=CH<sub>2</sub>Me<sub>3</sub>N-CH<sub>2</sub>-D1● Cl<sup>-</sup>

CM 2

CRN 1075-49-6

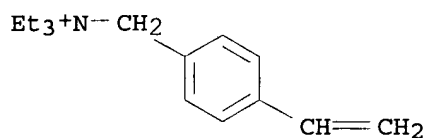
CMF C9 H8 O2



RN 220227-02-1 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer  
 with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

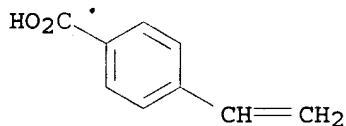
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 CMF C15 H24 N . Cl



● Cl<sup>-</sup>

CM 2

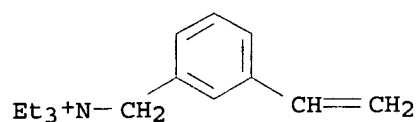
CRN 1075-49-6  
 CMF C9 H8 O2



RN 252721-97-4 HCAPLUS  
 CN Benzenemethanaminium, 3-ethenyl-N,N,N-triethyl-, chloride, polymer  
 with 4-ethenylbenzoic acid and 4-ethenyl-N,N,N-  
 triethylbenzenemethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

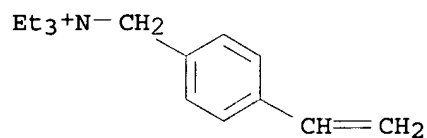
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 CMF C15 H24 N . Cl

● Cl<sup>-</sup>

CM 2

CRN 14350-43-7

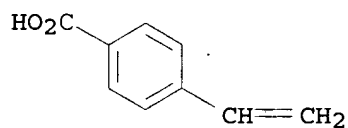
CMF C15 H24 N . Cl

● Cl<sup>-</sup>

CM 3

CRN 1075-49-6

CMF C9 H8 O2



- IC ICM G03F007-09  
ICS B41N001-08; B41N001-14; B41N003-03; C25D011-04; C25D011-16;  
G03F007-00
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)
- IT Anodization  
Lithographic plates  
(**heat-sensitive** lithog. plate using  
anodized aluminum support with size-controlled micropores)
- IT Phenolic resins, uses  
(**heat-sensitive** lithog. plate using  
anodized aluminum support with size-controlled micropores)
- IT 62200-40-2  
(**heat-sensitive** lithog. plate using  
anodized aluminum support with size-controlled micropores)

- IT 214279-68-2P, p-Vinylbenzoic acid-vinylbenzyltrimethylammonium chloride copolymer  
 220227-02-1P, Triethyl(p-vinylbenzyl)ammonium chloride-p-vinylbenzoic acid copolymer 252721-97-4P, Triethyl(m-vinylbenzyl)ammonium chloride-triethyl(p-vinylbenzyl)ammonium chloride-p-vinylbenzoic acid copolymer (intermediate layer; **heat-sensitive lithog.** plate using anodized aluminum support with size-controlled micropores)
- IT 124996-93-6P, Acrylonitrile-N-(p-aminosulfonylphenyl)methacrylamide-ethyl methacrylate copolymer (photosensitive layer; **heat-sensitive lithog.** plate using anodized aluminum support with size-controlled micropores)
- IT 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer (photosensitive layer; **heat-sensitive lithog.** plate using anodized aluminum support with size-controlled micropores)

L20 ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:61464 HCAPLUS  
 DOCUMENT NUMBER: 136:126583  
 TITLE: Lithographic printing original plates with high printability  
 INVENTOR(S): Taninaka, Hiromitsu; Yamazaki, Sumiaki  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002019317	A2	20020123	JP 2000-206906	2000 0707
PRIORITY APPLN. INFO.:				2000 0707

OTHER SOURCE(S): MARPAT 136:126583

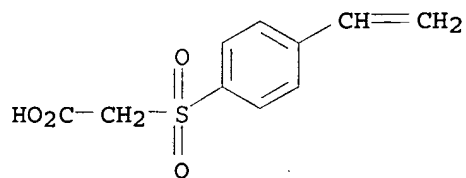
- AB In the original plates having **heat-sensitive** layers containing  $\geq 1$  components selected from thermoplastic polymer fine particles, thermosetting polymer fine particles, polymer fine particles having heat-reactive functional groups, and microcapsules containing hydrophilic compds. on hydrophilic supports, the **heat-sensitive** layers contain hydrophilic polymers which become hydrophobic by heat. Water-soluble overcoat layers may contain the hydrophilic polymers. The original plates are suitable for scanning exposure based on digital signals and show good on-press developability.
- IT 265316-79-8 265316-83-4 265316-84-5  
 265316-86-7 390801-06-6  
 (on-press developable **lithog.** original plates having **heat-sensitive** hydrophilic polymer layers)
- RN 265316-79-8 HCAPLUS  
 CN Acetic acid, [(4-ethenylphenyl)sulfonyl]-, sodium salt,

homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 265316-78-7

CMF C10 H10 O4 S . Na



● Na

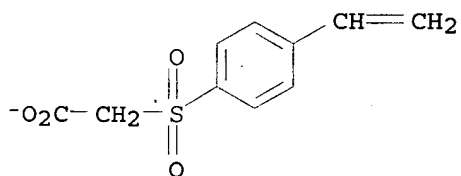
RN 265316-83-4 HCAPLUS

CN Methanaminium, N,N,N-trimethyl-, salt with [(4-ethenylphenyl)sulfonyl]acetic acid (1:1), homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 265316-82-3

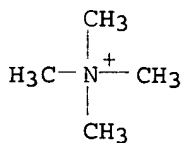
CMF C10 H9 O4 S



CM 2

CRN 51-92-3

CMF C4 H12 N

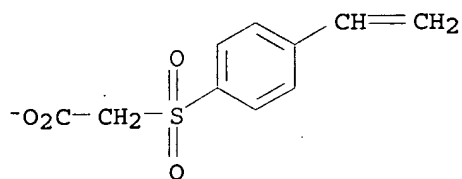


RN 265316-84-5 HCAPLUS

CN 1-Butanaminium, N,N,N-tributyl-, salt with [(4-ethenylphenyl)sulfonyl]acetic acid (1:1), homopolymer (9CI) (CA INDEX NAME)

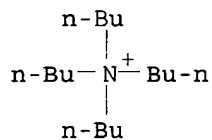
CM 1

CRN 265316-82-3  
CMF C10 H9 O4 S



CM 2

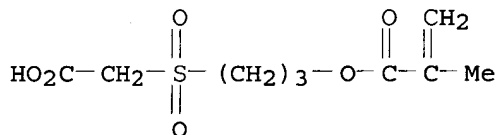
CRN 10549-76-5  
CMF C16 H36 N



RN 265316-86-7 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 3-[(carboxymethyl)sulfonyl]propyl ester, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 265316-85-6  
CMF C9 H14 O6 S . Na



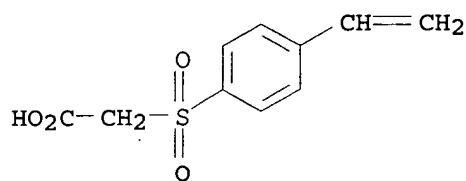
● Na

RN 390801-06-6 HCAPLUS  
CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with sodium [(4-ethenylphenyl)sulfonyl]acetate (9CI) (CA INDEX NAME)

CM 1

CRN 265316-78-7  
CMF C10 H10 O4 S . Na



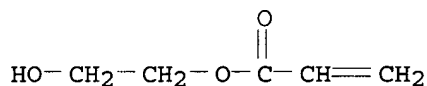


● Na

CM 2

CRN 818-61-1

CMP C5 H8 O3



- IC ICM B41N001-14  
ICS G03F007-00; G03F007-004; G03F007-039; G03F007-11
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST lithog original plate **heat sensitive**  
hydrophilic polymer; printability lithog original plate  
hydrophilic polymer; developability onpress lithog original plate  
hydrophilic polymer
- IT Polyesters, preparation  
(fine particles; on-press developable lithog. original plates  
having **heat-sensitive** hydrophilic polymer  
layers)
- IT Lithographic plates  
(on-press developable lithog. original plates having  
**heat-sensitive** hydrophilic polymer layers)
- IT 390801-07-7P 390801-08-8P, Takenate D 110N-Epikote 1004-PVA  
217EE copolymer 390801-09-9P, Epikote 1004-PVA  
217EE-trimethylolpropane-xylylene diisocyanate adduct copolymer  
(fine particles; on-press developable lithog. original plates  
having **heat-sensitive** hydrophilic polymer  
layers)
- IT 9003-53-6, Polystyrene  
(fine particles; on-press developable lithog. original plates  
having **heat-sensitive** hydrophilic polymer  
layers)
- IT 265316-79-8 265316-83-4 265316-84-5  
265316-86-7 265316-90-3 265316-98-1  
390801-06-6  
(on-press developable lithog. original plates having  
**heat-sensitive** hydrophilic polymer layers)
- IT 37321-70-3, JIS A 1050  
(supports; on-press developable lithog. original plates having  
**heat-sensitive** hydrophilic polymer layers)

L20 ANSWER 23 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2002:35841 HCAPLUS  
 DOCUMENT NUMBER: 136:103176  
 TITLE: Photo-sensitive polybenzoxazole  
**precursor** resins and  
 alkali-developable compositions useful for  
 lithographic patterning containing them  
 INVENTOR(S): Kaneda, Takayuki; Kimura, Masashi; Kanaya,  
 Ryuichiro  
 PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002012665	A2	20020115	JP 2000-335097	

2000  
1101

PRIORITY APPLN. INFO.: JP 2000-130480 A  
 2000  
0428

AB The resins are obtained from the reaction products of a polyamide bearing OH groups partially with OCN(CH<sub>2</sub>)<sub>m</sub>OCOC(R<sub>1</sub>):CR<sub>2</sub>R<sub>3</sub> (R<sub>1</sub>-3 = H, C1-3 aliphatic groups; m = 2-10), and used in compns. containing photoinitiators, crosslinkers and diluents for neg.-working photoresists in patterning of semiconductor devices. Thus, condensing 2,2-bis(3-amino-4-hydroxyphenyl)hexafluoropropane with 4,4'-diphenyl ether dicarboxylic acid dichloride, end-blocking the resulting polyamide with phthalic anhydride, purifying, and reacting the blocked product with 2-isocyanatoethyl methacrylate (at an amount equivalent to 40 mol% of OH groups on the product) gave a polybenzoxazole **precursor** 100 parts of which was combined with tetraethylene glycol dimethacrylate 40, 1-phenyl-propanedione-2-(o-benzoyl) oxime 6, Michler's ketone 2, 3-aminopropyltrimethoxysilane 6, N-nitrosodiphenylamine 0.1 and N-methyl-2-pyrrolidone 230 parts to give a neg.-working photoresist with good light curability and developing property by alkali.

IT **389104-92-1DP**, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-tetraethylene glycol dimethacrylate copolymer, reaction products with termination acids **389104-92-1P**, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-tetraethylene glycol dimethacrylate copolymer **389104-93-2DP**, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-N,N'-di(2-methacryloxyethyl)urea copolymer, reaction products with termination acids **389104-94-3P**, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-N,N'-di(2-methacryloxyethyl)urea-tetraethylene

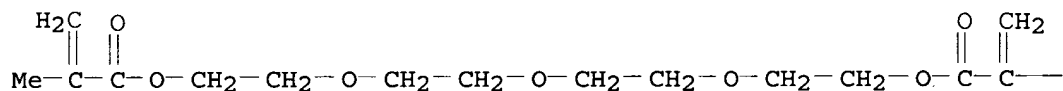
glycol dimethacrylate copolymer  
 (photo-sensitive polybenzoxazole precursor resins and  
 alkali-developable compns. useful for lithog.  
 patterning containing them)

RN 389104-92-1 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, oxybis(2,1-ethanediyl-2,1-ethanediyl) ester, polymer with 4,4'-oxybis[benzoyl chloride] polymer with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-aminophenol] [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 109-17-1  
 CMF C16 H26 O7

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PAGE 1-B

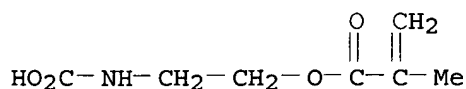
— Me

CM 2

CRN 389104-91-0  
 CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3)x . x C7 H11 N O4

CM 3

CRN 96571-20-9  
 CMF C7 H11 N O4

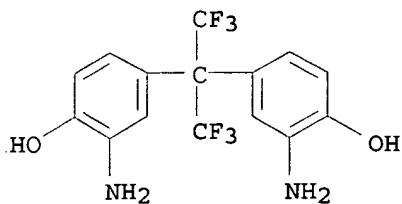


CM 4

CRN 133440-72-9  
 CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3)x  
 CCI PMS

CM 5

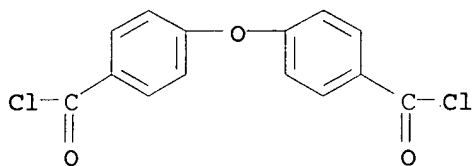
CRN 83558-87-6  
 CMF C15 H12 F6 N2 O2



CM 6

CRN 7158-32-9

CMF C14 H8 Cl2 O3



RN 389104-92-1 HCAPLUS

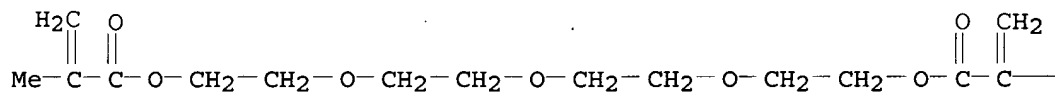
CN 2-Propenoic acid, 2-methyl-, oxybis(2,1-ethanediyl) ester, polymer with 4,4'-oxybis(benzoyl chloride) polymer with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-aminophenol] [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 109-17-1

CMF C16 H26 O7

PAGE 1-A



PAGE 1-B

— Me

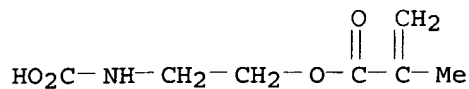
CM 2

CRN 389104-91-0

CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3)x . x C7 H11 N O4

CM 3

CRN 96571-20-9  
 CMF C7 H11 N O4

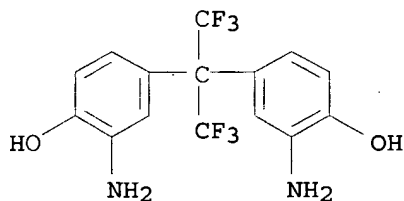


CM 4

CRN 133440-72-9  
 CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3)x  
 CCI PMS

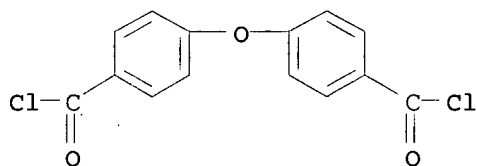
CM 5

CRN 83558-87-6  
 CMF C15 H12 F6 N2 O2



CM 6

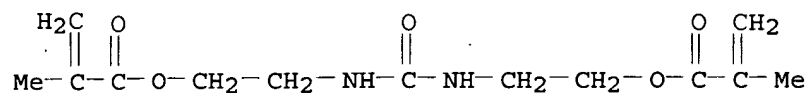
CRN 7158-32-9  
 CMF C14 H8 Cl2 O3



RN 389104-93-2 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, carbonylbis(imino-2,1-ethanediyl) ester, polymer with 4,4'-oxybis(benzoyl chloride) polymer with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-aminophenol] [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 86219-64-9  
 CMF C13 H20 N2 O5



CM 2

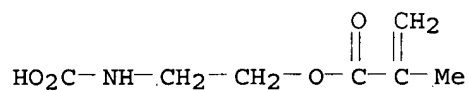
CRN 389104-91-0

CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3)x . x C7 H11 N O4

CM 3

CRN 96571-20-9

CMF C7 H11 N O4



CM 4

CRN 133440-72-9

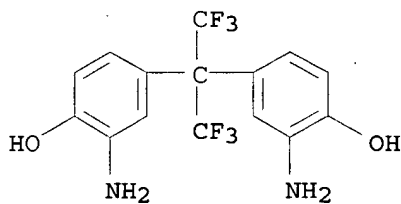
CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3)x

CCI PMS

CM 5

CRN 83558-87-6

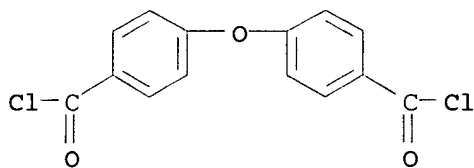
CMF C15 H12 F6 N2 O2



CM 6

CRN 7158-32-9

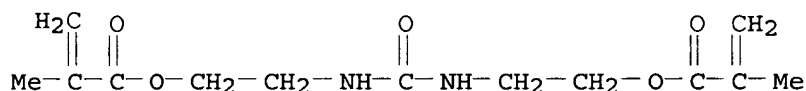
CMF C14 H8 Cl2 O3



RN 389104-94-3 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, carbonylbis(imino-2,1-ethanediyl)  
 ester, polymer with 4,4'-oxybis(benzoyl chloride) polymer with  
 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-  
 aminophenol] [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate,  
 and oxybis(2,1-ethanediyl)oxy-2,1-ethanediyl) bis(2-methyl-2-  
 propenoate) (9CI) (CA INDEX NAME)

CM 1

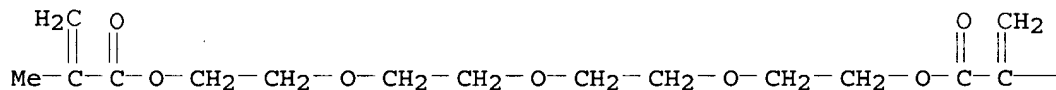
CRN 86219-64-9  
 CMF C13 H20 N2 O5



CM 2

CRN 109-17-1  
 CMF C16 H26 O7

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PAGE 1-B

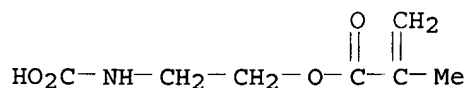
— Me

CM 3

CRN 389104-91-0  
 CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3)x . x C7 H11 N O4

CM 4

CRN 96571-20-9  
 CMF C7 H11 N O4

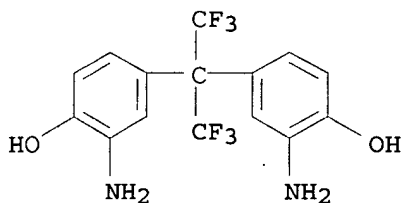


CM 5

CRN 133440-72-9  
 CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3)x  
 CCI PMS

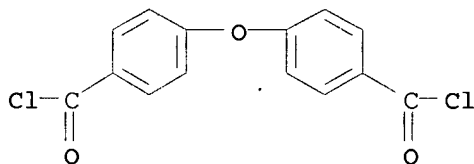
CM 6

CRN 83558-87-6  
 CMF C15 H12 F6 N2 O2



CM 7

CRN 7158-32-9  
 CMF C14 H8 Cl2 O3



IT 389104-83-0P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, phthalic anhydride-terminated, ester with 2-isocyanatoethyl methacrylate  
 389104-84-1P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with methanesulfonyl chloride, carbamate ester with 2-isocyanatoethyl methacrylate  
 389104-85-2P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with p-toluenesulfonyl chloride, carbamate ester with 2-isocyanatoethyl methacrylate  
 389104-86-3P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with 5-norbornene-2,3-dicarboxylic anhydride, carbamate ester with 2-isocyanatoethyl methacrylate  
 389104-87-4P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with glutaric anhydride, carbamate ester with 2-isocyanatoethyl methacrylate  
 389104-89-6P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with di-tert-butyl carbonate, carbamate ester with 2-isocyanatoethyl methacrylate  
 389104-90-9P,



2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, carbamate ester with 2-isocyanatoethyl methacrylate  
**389104-95-4P**, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with cyclohexane-1,2-dicarboxylic anhydride, carbamate ester with 2-isocyanatoethyl methacrylate  
 (photo-sensitive polybenzoxazole precursor resins and alkali-developable compns. useful for lithog. patterning containing them)

RN 389104-83-0 HCAPLUS

CN Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene) [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] (4-hydroxy-1,3-phenylene) iminocarbonyl-1,4-phenylene],  $\alpha$ -[4-[[[3-[1-[3-[(2-carboxybenzoyl)amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenyl]- $\omega$ -[4-[[[3-[1-[3-[(2-carboxybenzoyl)amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenoxy]-, [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

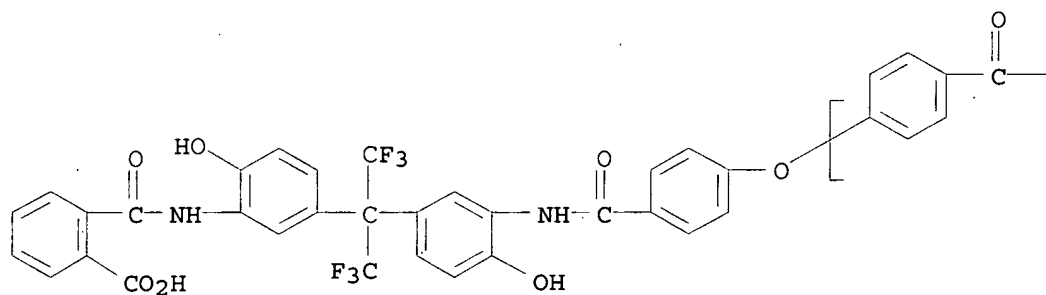
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CRN 389077-92-3

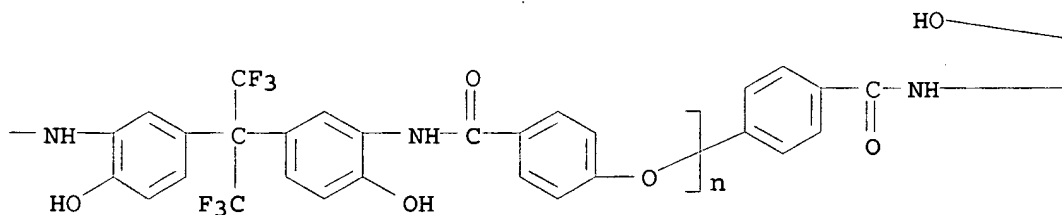
CMF (C29 H18 F6 N2 O5)n C60 H38 F12 N4 O13

CCI PMS

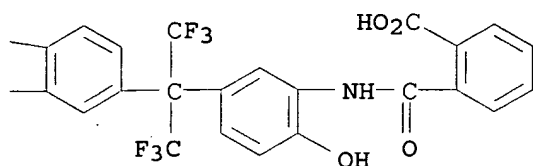
PAGE 1-A



PAGE 1-B

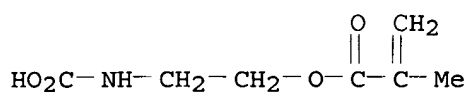


PAGE 1-C



CM 2

CRN 96571-20-9  
 CMF C7 H11 N O4

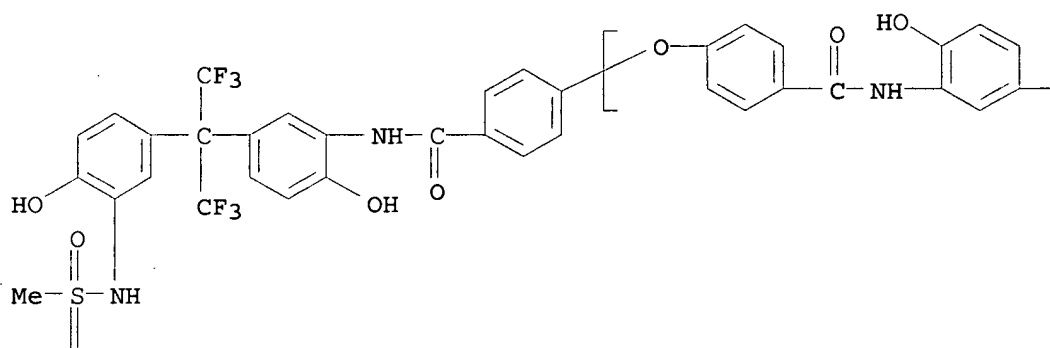


RN 389104-84-1 HCAPLUS  
 CN Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene) [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] (4-hydroxy-1,3-phenylene) iminocarbonyl-1,4-phenylene],  $\alpha$ -[4-[[[6-hydroxy-3-[2,2,2-trifluoro-1-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]-1-(trifluoromethyl)ethyl]phenyl]amino]carbonyl]phenyl]- $\omega$ -[4-[[[6-hydroxy-3-[2,2,2-trifluoro-1-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]-1-(trifluoromethyl)ethyl]phenyl]amino]carbonyl]phenoxy]-, [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

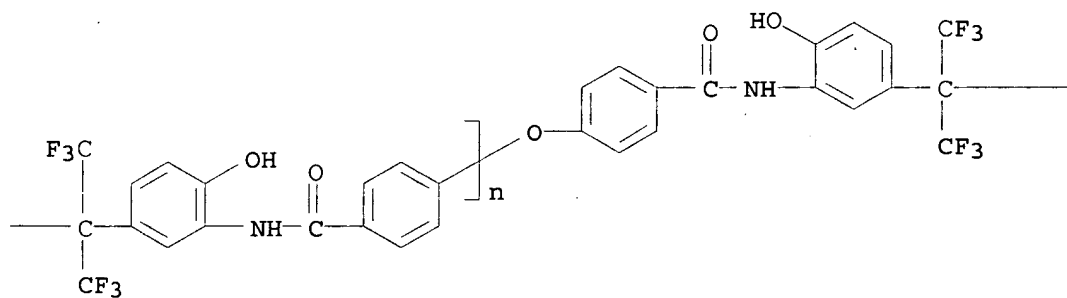
CM 1

CRN 389077-94-5  
 CMF (C29 H18 F6 N2 O5)n C46 H34 F12 N4 O11 S2  
 CCI PMS

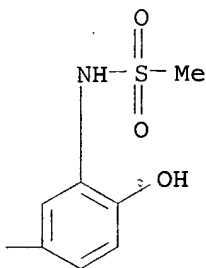
PAGE 1-A



PAGE 1-B



PAGE 1-C

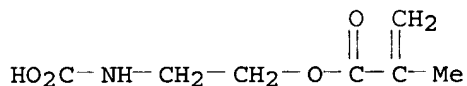


PAGE 2-A



CM 2

CRN 96571-20-9  
CMF C7 H11 N O4

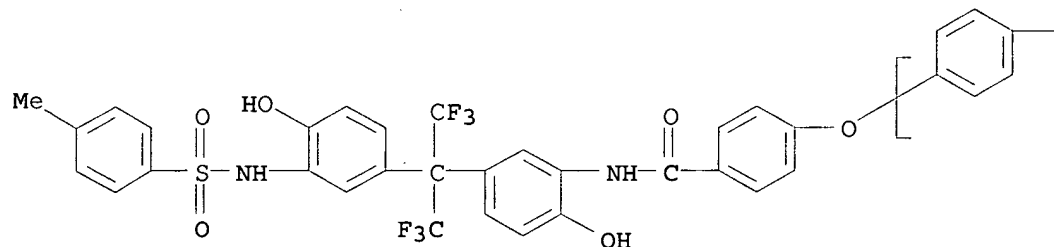


RN 389104-85-2 HCAPLUS  
CN Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene) [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] (4-hydroxy-1,3-phenylene) iminocarbonyl-1,4-phenylene],  $\alpha$ -[4-[[[6-hydroxy-3-[2,2,2-trifluoro-1-[4-hydroxy-3-[[[4-methylphenyl]sulfonyl]amino]phenyl]-1-(trifluoromethyl)ethyl]phenyl]amino]carbonyl]phenyl]- $\omega$ -[4-[[[6-hydroxy-3-[2,2,2-trifluoro-1-[4-hydroxy-3-[[[4-methylphenyl]sulfonyl]amino]phenyl]-1-(trifluoromethyl)ethyl]phenyl]amino]carbonyl]phenoxy]-, [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

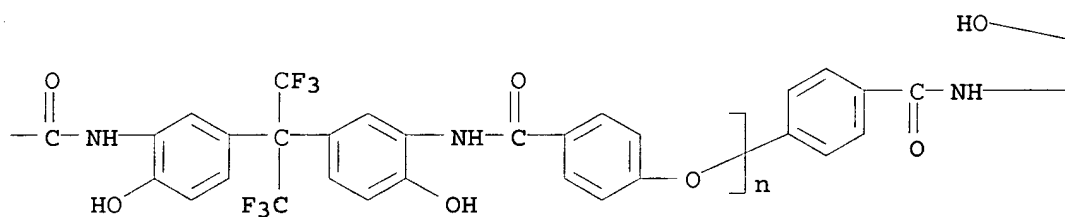
CM 1

CRN 389077-95-6  
CMF (C29 H18 F6 N2 O5)n C58 H42 F12 N4 O11 S2  
CCI PMS

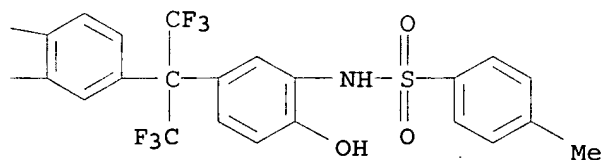
PAGE 1-A



PAGE 1-B

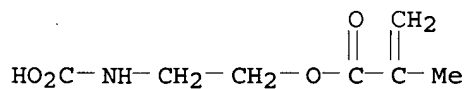


PAGE 1-C



CM 2

CRN 96571-20-9  
 CMF C7 H11 N O4



RN 389104-86-3 HCAPLUS  
 CN Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene) [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] (4-hydroxy-1,3-phenylene) iminocarbonyl-1,4-phenylene],  $\alpha$ -[4-[[[3-[2,2,2-trifluoro-1-[3-(1,3,3a,4,7,7a-hexahydro-1,3-dioxo-4,7-methano-2H-isoindol-2-yl)-4-hydroxyphenyl]-1-(trifluoromethyl)ethyl]-6-

hydroxyphenyl]amino]carbonyl]phenyl]- $\omega$ -[4-[[[3-[2,2,2-trifluoro-1-[3-(1,3,3a,4,7,7a-hexahydro-1,3-dioxo-4,7-methano-2H-isoindol-2-yl)-4-hydroxyphenyl]-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenoxy]-, [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

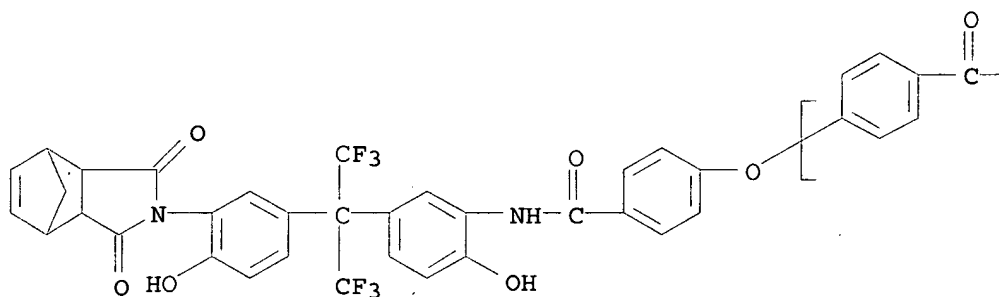
CM 1

CRN 389077-97-8

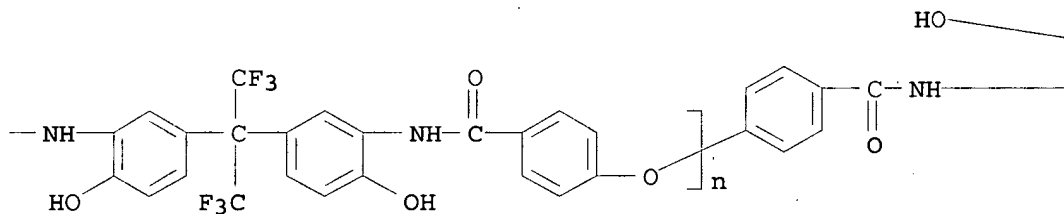
CMF (C29 H18 F6 N2 O5)n C62 H42 F12 N4 O11

CCI PMS

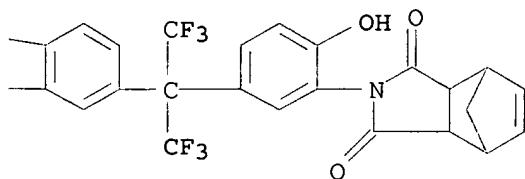
PAGE 1-A



PAGE 1-B



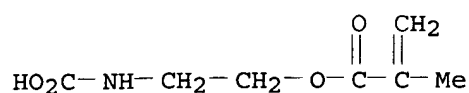
PAGE 1-C



CM 2

CRN 96571-20-9

CMF C7 H11 N O4



RN 389104-87-4 HCAPLUS

CN Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene) [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] (4-hydroxy-1,3-phenylene)iminocarbonyl-1,4-phenylene],  $\alpha$ -[4-[[[3-[1-[3-[(4-carboxy-1-oxobutyl)amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenyl]- $\omega$ -[4-[[[3-[1-[3-[(4-carboxy-1-oxobutyl)amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenoxy]-(9CI) (CA INDEX NAME)

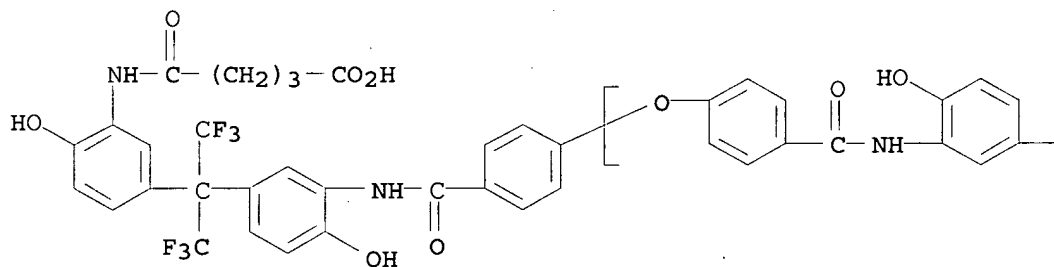
CM 1

CRN 389077-99-0

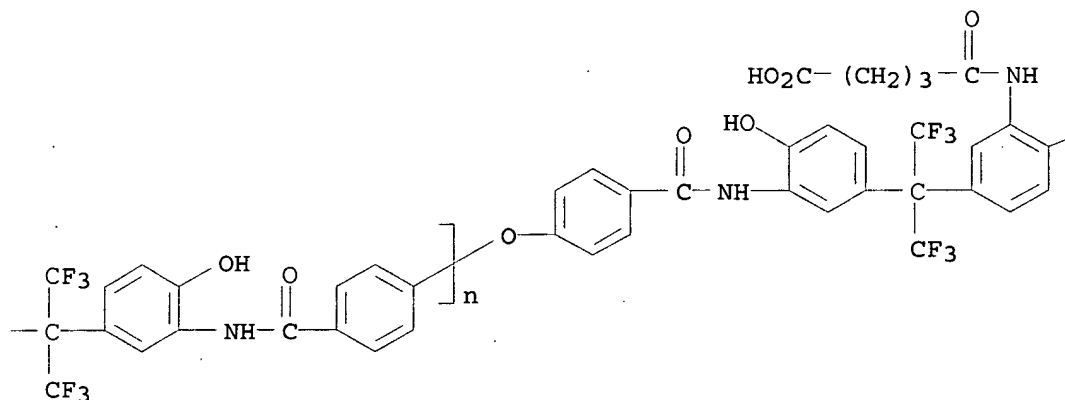
CMF (C29 H18 F6 N2 O5)n C54 H42 F12 N4 O13

CCI PMS

PAGE 1-A



PAGE 1-B

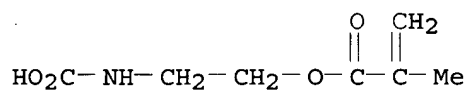


PAGE 1-C

OH

CM 2

CRN 96571-20-9  
CMF C7 H11 N O4



RN 389104-89-6 HCAPLUS

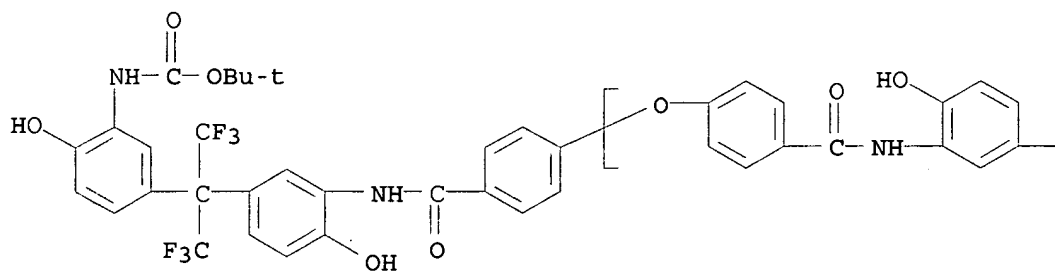
CN Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene) [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] (4-hydroxy-1,3-phenylene) iminocarbonyl-1,4-phenylene],  $\alpha$ -[4-[[[3-[1-[3-[[[(1,1-dimethylethoxy) carbonyl] amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl] amino] carbonyl] phenyl]- $\omega$ -[4-[[[3-[1-[3-[[[(1,1-dimethylethoxy) carbonyl] amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl] amino] carbonyl] phenoxy]-, [2-[(2-methyl-1-oxo-2-propenyl) oxy] ethyl] carbamate (9CI) (CA INDEX NAME)

CM 1

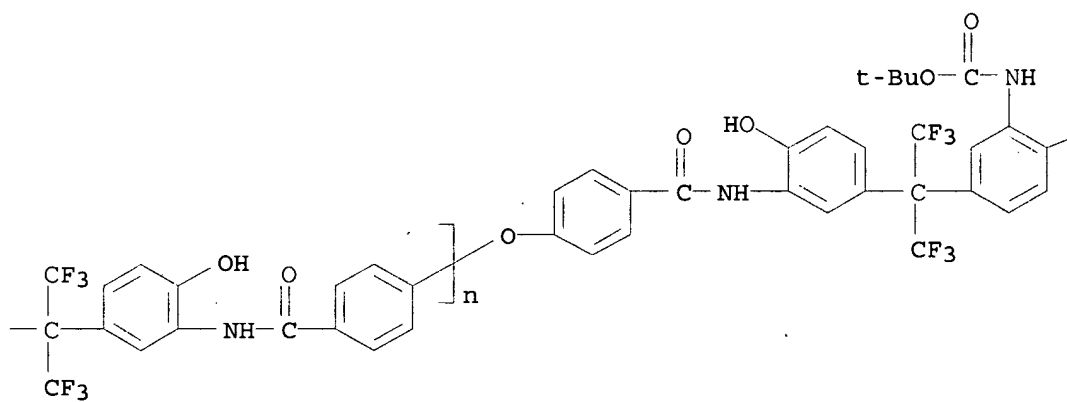
CRN 389104-88-5  
CMF (C29 H18 F6 N2 O5)n C54 H46 F12 N4 O11  
CCI PMS



PAGE 1-A



PAGE 1-B

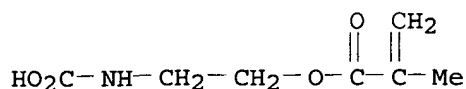


PAGE 1-C

OH

CM 2 .

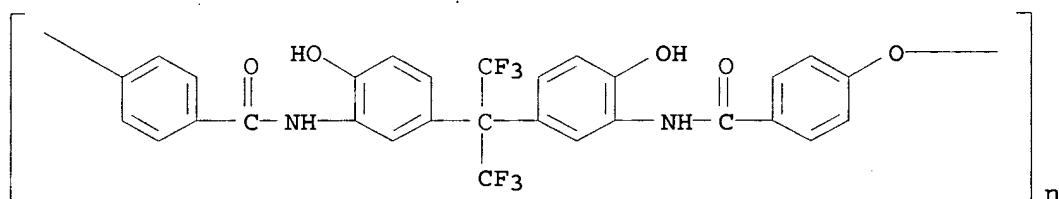
CRN 96571-20-9  
 CMF C7 H11 N O4



RN 389104-90-9 HCAPLUS  
 CN Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene) [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] (4-hydroxy-1,3-phenylene)iminocarbonyl-1,4-phenylene], [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (ester) (9CI) (CA INDEX NAME)

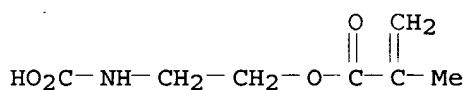
CM 1

CRN 112480-82-7  
 CMF (C29 H18 F6 N2 O5)n  
 CCI PMS



CM 2

CRN 96571-20-9  
 CMF C7 H11 N O4

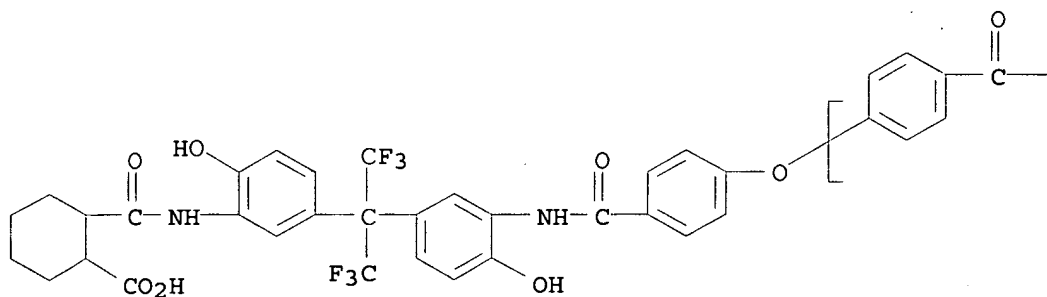


RN 389104-95-4 HCAPLUS  
 CN Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene) [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] (4-hydroxy-1,3-phenylene)iminocarbonyl-1,4-phenylene],  $\alpha$ -[4-[[[3-[1-[3-[[[2-carboxycyclohexyl]carbonyl]amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenyl]- $\omega$ -[4-[[[3-[1-[3-[[[2-carboxycyclohexyl]carbonyl]amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenoxy]-, [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

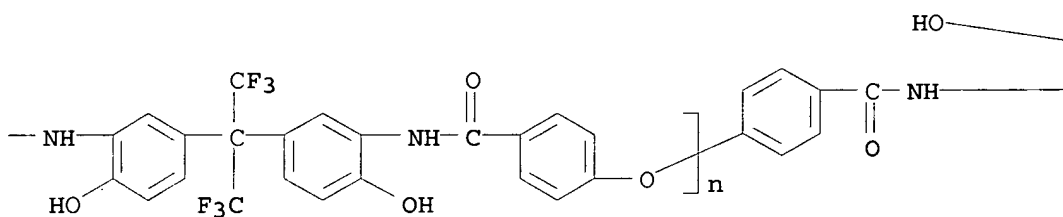
CM 1

CRN 389078-02-8  
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 CCI PMS

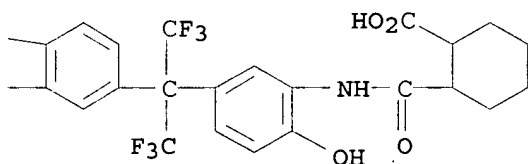
PAGE 1-A



PAGE 1-B

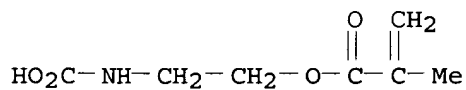


PAGE 1-C



CM 2

CRN 96571-20-9  
 CMF C7 H11 N O4



IC ICM C08G073-22  
 ICS C08K005-00; C08L079-06; G03F007-038; G03F007-40; H01L021-027  
 CC 37-3 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 74, 76  
 ST neg working photoresist hydroxy polyamide isocyanatoethyl  
 methacrylate modified resin; semiconductor device lithog  
 patterning acrylic hydroxy polyamide polybenzoxazole

- precursor**
- IT Polyethers, preparation  
(acrylic-polyamide-, fluorine-containing; photo-sensitive polybenzoxazole **precursor** resins and alkali-developable compns. useful for lithog. patterning containing them)
- IT Fluoropolymers, preparation  
(acrylic-polyamide-polyether-; photo-sensitive polybenzoxazole **precursor** resins and alkali-developable compns. useful for lithog. patterning containing them)
- IT Polyethers, preparation  
(acrylic-polybenzoxazole-, fluorine-containing; photo-sensitive polybenzoxazole **precursor** resins and alkali-developable compns. useful for lithog. patterning containing them)
- IT Fluoropolymers, preparation  
(acrylic-polybenzoxazole-polyether-; photo-sensitive polybenzoxazole **precursor** resins and alkali-developable compns. useful for lithog. patterning containing them)
- IT Polybenzoxazoles  
(acrylic-polyether-, fluorine-containing; photo-sensitive polybenzoxazole **precursor** resins and alkali-developable compns. useful for lithog. patterning containing them)
- IT Polyamides, preparation  
(acrylic-polyether-, fluorine-containing; photo-sensitive polybenzoxazole **precursor** resins and alkali-developable compns. useful for lithog. patterning containing them)
- IT Dielectric films  
Photoresists  
Semiconductor device fabrication  
(photo-sensitive polybenzoxazole **precursor** resins and alkali-developable compns. useful for lithog. patterning containing them)
- IT Acrylic polymers, preparation  
(polybenzoxazole-polyether-, fluorine-containing; photo-sensitive polybenzoxazole **precursor** resins and alkali-developable compns. useful for lithog. patterning containing them)
- IT **389104-92-1DP**, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-tetraethylene glycol dimethacrylate copolymer, reaction products with termination acids **389104-92-1P**, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-tetraethylene glycol dimethacrylate copolymer **389104-93-2DP**, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-N,N'-di(2-methacryloxyethyl)urea copolymer, reaction products with termination acids **389104-94-3P**, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-N,N'-di(2-methacryloxyethyl)urea-tetraethylene glycol dimethacrylate copolymer  
(photo-sensitive polybenzoxazole **precursor** resins and alkali-developable compns. useful for lithog.

- patterning containing them)
- IT 389104-83-0P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, phthalic anhydride-terminated, ester with 2-isocyanatoethyl methacrylate 389104-84-1P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with methanesulfonyl chloride, carbamate ester with 2-isocyanatoethyl methacrylate 389104-85-2P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with p-toluenesulfonyl chloride, carbamate ester with 2-isocyanatoethyl methacrylate 389104-86-3P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with 5-norbornene-2,3-dicarboxylic anhydride, carbamate ester with 2-isocyanatoethyl methacrylate 389104-87-4P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with glutaric anhydride, carbamate ester with 2-isocyanatoethyl methacrylate 389104-89-6P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with di-tert-butyl carbonate, carbamate ester with 2-isocyanatoethyl methacrylate 389104-90-9P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, carbamate ester with 2-isocyanatoethyl methacrylate 389104-95-4P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with cyclohexane-1,2-dicarboxylic anhydride, carbamate ester with 2-isocyanatoethyl methacrylate (photo-sensitive polybenzoxazole **precursor** resins and alkali-developable compns. useful for lithog. patterning containing them)
- IT 112480-82-7P 133440-72-9DP, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer, reaction products with termination acids 389077-92-3P 389077-94-5P 389077-95-6P 389077-97-8P 389077-99-0P 389078-01-7P 389078-02-8P (photo-sensitive polybenzoxazole **precursor** resins and alkali-developable compns. useful for lithog. patterning containing them)
- IT 17322-98-4 (photoinitiators; photo-sensitive polybenzoxazole **precursor** resins and alkali-developable compns. useful for lithog. patterning containing them)

L20 ANSWER 24 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:709715 HCAPLUS

DOCUMENT NUMBER: 135:264587

TITLE: Lithographic printing plate **precursor** comprising compounds with changable hydrophilicity under heat

INVENTOR(S): Oohashi, Hidekazu

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 110 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1136281	A1	20010926	EP 2001-106393	2001 0320
EP 1136281	B1	20040121		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001337460	A2	20011207	JP 2000-337792	2000 1106
US 2003190553	A1	20031009	US 2001-812053	2001 0320
US 6680161	B2	20040120		
EP 1371500	A1	20031217	EP 2003-21157	2001 0320
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
AT 258115	E	20040215	AT 2001-106393	2001 0320
PRIORITY APPLN. INFO.:				
			JP 2000-78597	A 2000 0321
			JP 2000-337792	A 2000 1106
			EP 2001-106393	A3 2001 0320

AB A lithog. printing plate **precursor** which comprises a support having a hydrophilic surface containing a latex A and an ink-receptive layer B whose solubility at least either in water or in an aqueous solution is converted by heat, wherein at least one layer of either layer A or layer B contains a light/heat converting agent. The object of the present invention is to provide a lithog. printing plate **precursor** developable with water or an aqueous solution, loadable on a printing machine without development after imaging and printable, which is improved in sensitivity and press life, and capable of providing clear printed matters having no residual colors and stains.

IT 265316-27-6 289893-00-1 289893-02-3

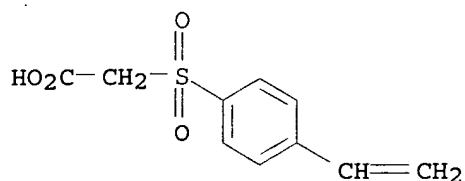
(lithog. printing plate **precursor**  
 comprising compds. with changable hydrophilicity under heat)

RN 265316-27-6 HCAPLUS

CN Acetic acid, [(4-ethenylphenyl)sulfonyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

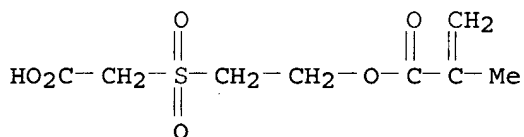
CRN 103945-08-0  
CMF C10 H10 O4 S



RN 289893-00-1 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-[(carboxymethyl)sulfonyl]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

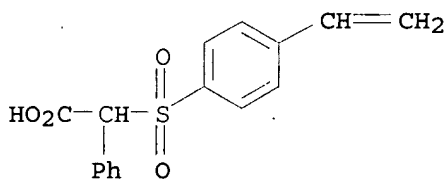
CRN 289892-99-5  
CMF C8 H12 O6 S



RN 289893-02-3 HCAPLUS  
CN Benzeneacetic acid, α-[(4-ethenylphenyl)sulfonyl]-, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 289893-01-2  
CMF C16 H14 O4 S . Na



● Na

IC ICM B41N001-14  
ICS B41C001-10; B41M005-36  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST lithog printing plate **precursor** compd heat induced changable hydrophilicity  
IT Hydrophilicity

## Lithographic plates

(lithog. printing plate **precursor** comprising compds.  
with changable hydrophilicity under heat)

IT 134127-48-3 289893-03-4 361542-00-9  
(IR absorber; lithog. printing plate **precursor**  
comprising compds. with changable hydrophilicity under heat)  
IT 55844-94-5P, Styrene-chloromethylstyrene-divinylbenzene copolymer  
81876-52-0P, tert-Butyl methacrylate-ethylene glycol  
dimethacrylate copolymer 361486-95-5P  
(lithog. printing plate **precursor** comprising compds.  
with changable hydrophilicity under heat)  
IT 52858-60-3 215958-15-9 215958-19-3 265316-27-6  
265316-42-5 265316-43-6 289893-00-1  
289893-02-3

(lithog. printing plate **precursor**

comprising compds. with changable hydrophilicity under heat)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L20 ANSWER 25 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:579379 HCAPLUS

DOCUMENT NUMBER: 135:173003

TITLE: Silver halide diffusion-transfer lithographic  
plate **precursor** having protecting  
layer on support

INVENTOR(S): Endo, Akihiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 34 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001215712	A2	20010810	JP 2000-25546	2000 0202

PRIORITY APPLN. INFO.: JP 2000-25546

2000  
0202

AB The title printing plate **precursor** has a phys.  
development nuclei layer and a light-sensitive silver halide  
emulsion layer on an aluminum support, wherein the aluminum  
support has 0.1-10 mg/m<sup>2</sup> Si atom adhered on the surface and a  
protecting layer made of a polymer having repeating units of onium  
groups and Ag coordinated groups. The materials, which has the  
controlled amount of Si on the support and the protecting layer on  
the support, provides the printing plate of the improved printing  
durability and the prevented soiling.

IT 214279-68-2 353456-37-8

(protecting layer on support for silver halide  
diffusion-transfer lithog. plate **precursor**)

RN 214279-68-2 HCAPLUS

CN Benzenemethanaminium, ar-ethenyl-N,N,N-trimethyl-, chloride,  
polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

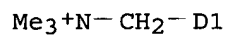
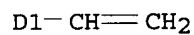


CM 1

CRN 26616-35-3

CMF C12 H18 N . Cl

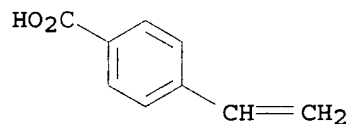
CCI IDS



CM 2

CRN 1075-49-6

CMF C9 H8 O2



RN 353456-37-8 HCAPLUS

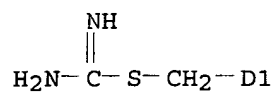
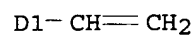
CN Benzenemethanaminium, ar-ethenyl-N,N,N-triethyl-, chloride,  
polymer with 4-ethenylbenzoic acid and (ethenylphenyl)methyl  
carbamidodithioate monohydrochloride (9CI) (CA INDEX NAME)

CM 1

CRN 87051-44-3

CMF C10 H12 N2 S . Cl H

CCI IDS

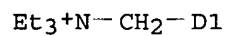
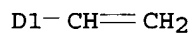


CM 2

CRN 51241-16-8

CMF C15 H24 N . Cl

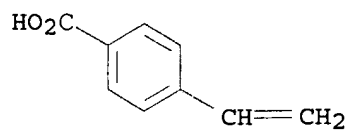
CCI IDS



CM 3

CRN 1075-49-6

CMF C9 H8 O2



IC ICM G03F007-07  
ICS G03C008-06; G03F007-00; G03F007-11  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST silver halide complex diffusion transfer lithog plate  
**precursor**  
IT Lithographic plates  
Photographic emulsions  
(silver halide diffusion-transfer lithog. plate  
**precursor** having protecting layer on support)  
IT 7429-90-5, Aluminum, uses  
(Silver halide diffusion-transfer lithog. plate  
**precursor** having protecting layer on support)  
IT 1344-09-8, Sodium silicate  
(Silver halide diffusion-transfer lithog. plate  
**precursor** having protecting layer on support)  
IT 121448-09-7 **214279-68-2** 353456-34-5 353456-35-6  
353456-36-7 **353456-37-8** 353456-38-9  
(protecting layer on support for silver halide  
diffusion-transfer lithog. plate **precursor**)

L20 ANSWER 26 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2001:100796 HCAPLUS  
DOCUMENT NUMBER: 134:170840  
TITLE: Lithographic plates for writing by low-energy  
heat mode exposure  
INVENTOR(S): Yamazaki, Sumiaki; Kawamura, Koichi  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 42 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2001033949	A2	20010209	JP 2000-144823	2000 0517
PRIORITY APPLN. INFO.:			JP 1999-138776	A 1999 0519

AB The plate comprises a recording layer containing a 3-dimensionally crosslinked polymer layer having hydrophilic functional groups, which change into hydrophobic groups on irradiation of radiant beam or heat. Preferably, the polymer is a hydrolysis polymerization product of (a) compds. having the hydrophilic functional groups and  $\geq 1$  group(s) selected from OH, NH<sub>2</sub>, NHCOR<sub>3</sub>, and Si(OR<sub>4</sub>)<sub>3</sub> (R<sub>3</sub>-4 = alkyl, aryl) and (b) R<sub>5</sub>nX<sub>1</sub>(OR<sub>6</sub>)<sub>4-n</sub> (R<sub>5</sub>-6 = alkyl, aryl; X<sub>1</sub> = Si, Al, Ti, Zr; n = 0, 1, 2). The recording layer may also contain photo-thermal conversion substances, e.g. IR absorbers. The polymer may be crosslinked by application of light or heat. Images are formed on the plates by direct writing of digital information.

IT **324752-52-5P 324752-69-4P**  
(heat mode exposure direct writing lithog. plates  
comprising of radiation- or **heat-sensitive**

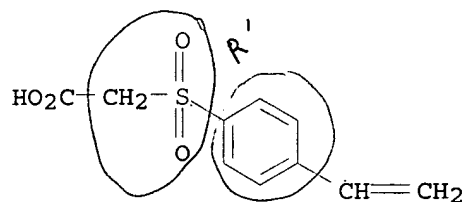
hydrophilic crosslinked polymers)

RN 324752-52-5 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with  
 [(4-ethenylphenyl)sulfonyl]acetic acid, silicic acid and silicic  
 acid ethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 103945-08-0

CMF C10 H10 O4 S



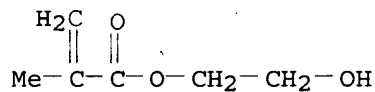
CM 2

CRN 1343-98-2  
 CMF Unspecified  
 CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 3

CRN 868-77-9  
 CMF C6 H10 O3



CM 4

CRN 11099-06-2  
 CMF C2 H6 O . x Unspecified

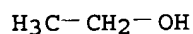
CM 5

CRN 1343-98-2  
 CMF Unspecified  
 CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 6

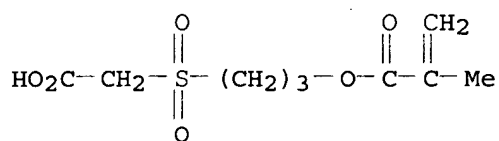
CRN 64-17-5  
 CMF C2 H6 O



RN 324752-69-4 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 3-[(carboxymethyl)sulfonyl]propyl ester, polymer with silicic acid, silicic acid ethyl ester and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

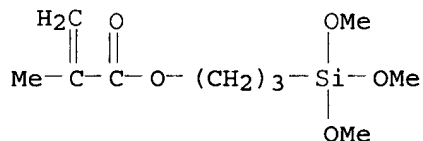
CM 1

CRN 265316-39-0  
 CMF C9 H14 O6 S



CM 2

CRN 2530-85-0  
 CMF C10 H20 O5 Si



CM 3

CRN 1343-98-2  
 CMF Unspecified  
 CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 4

CRN 11099-06-2  
 CMF C2 H6 O . x Unspecified

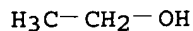
CM 5

CRN 1343-98-2  
 CMF Unspecified  
 CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 6

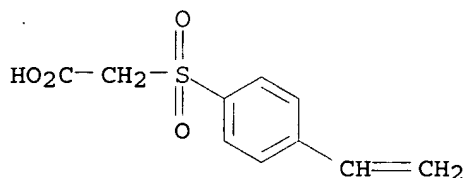
CRN 64-17-5  
CMF C2 H6 O



IT 324747-77-5P  
(heat mode exposure direct writing lithog. plates  
comprising of radiation- or heat-sensitive  
hydrophilic crosslinked polymers)  
RN 324747-77-5 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester,  
polymer with [(4-ethenylphenyl)sulfonyl]acetic acid (9CI) (CA  
INDEX NAME)

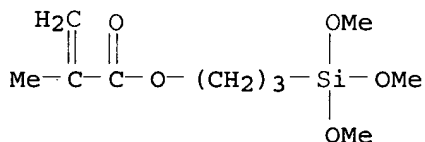
CM 1

CRN 103945-08-0  
CMF C10 H10 O4 S



CM 2

CRN 2530-85-0  
CMF C10 H20 O5 Si



IC ICM G03F007-00  
ICS B41N001-14; G03F007-004; G03F007-075  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)  
Section cross-reference(s): 38  
IT Optical materials  
(IR absorbers; heat mode exposure direct writing lithog. plates  
comprising of radiation- or heat-sensitive  
hydrophilic crosslinked polymers)  
IT IR materials  
(absorbers; heat mode exposure direct writing lithog. plates  
comprising of radiation- or heat-sensitive  
hydrophilic crosslinked polymers)  
IT Ceramers

## Lithographic plates

## Photoimaging materials

(heat mode exposure direct writing lithog. plates comprising of radiation- or **heat-sensitive** hydrophilic crosslinked polymers)

## IT Recording materials

(thermal; heat mode exposure direct writing lithog. plates comprising of radiation- or **heat-sensitive** hydrophilic crosslinked polymers)

IT 5496-71-9, IRG 022 22371-56-8, NK 3508

(IR absorber; heat mode exposure direct writing lithog. plates comprising of radiation- or **heat-sensitive** hydrophilic crosslinked polymers)

IT 324747-69-5P 324747-70-8P 324747-72-0P 324747-74-2P

324747-75-3P 324747-76-4P **324752-52-5P** 324752-53-6P

324752-55-8P 324752-56-9P 324752-58-1P 324752-61-6P

324752-63-8P 324752-66-1P 324752-67-2P 324752-68-3P

**324752-69-4P**

(heat mode exposure direct writing lithog. plates comprising of radiation- or **heat-sensitive** hydrophilic crosslinked polymers)

IT 324747-67-3P 324747-73-1P

(heat mode exposure direct writing lithog. plates comprising of radiation- or **heat-sensitive** hydrophilic crosslinked polymers)

IT **324747-77-5P**

(heat mode exposure direct writing lithog. plates comprising of radiation- or **heat-sensitive** hydrophilic crosslinked polymers)

IT 324747-78-6P

(heat mode exposure direct writing lithog. plates comprising of radiation- or **heat-sensitive** hydrophilic crosslinked polymers)

L20 ANSWER 27 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:496062 HCAPLUS

DOCUMENT NUMBER: 121:96062

TITLE: Electrophotographic lithographic plate  
**precursor**

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 98 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	----	-----	
JP 05127393	A2	19930525	JP 1991-311312	1991 1031
PRIORITY APPLN. INFO.:			JP 1991-311312	1991 1031

AB In the title **precursor** utilizing an electrophotog.  
photoreceptor made by forming on an elec. conductive support

≥1 photoconductive layer(s) and forming on the top layer a surface layer, the surface layer contains ≥1 kind(s) of the following nonaq. solvent-dispersed resin grains [L] and the photoconductive layer contains ≥1 kind(s) of the following resins [A] as a binder resin. The resin grains [L] are obtained in a nonaq. solvent by dispersion polymerization of ≥1 kind(s) of mono functional monomers (C) being soluble in the nonaq. solvent but insol. after polymerization and which contains ≥1 kind(s) of functional groups which forms ≥1 of SH, SO<sub>3</sub>H, amino, and P(:Z)(-Z-H)R<sub>1</sub> groups [Z = O, S; R<sub>1</sub> = -Z-H, hydrocarbon, -Z-R<sub>2</sub> (R<sub>2</sub> = hydrocarbon)] upon decomposition in the presence of a dispersion stabilizing polymer containing at least repeating units containing a substituent group(s) containing Si and/or F and soluble to the nonaq. solvent. The resins [A] are resins having a weight average mol. weight 1 x 10<sup>3</sup>-2 x 10<sup>4</sup>; the resins contain as a polymer component the repeating monomer units [-CHa<sub>1</sub>-Ca<sub>2</sub>(CO<sub>2</sub>R<sub>3</sub>)-] (a<sub>1</sub>, a<sub>2</sub> = H, halo, CN, hydrocarbon group; R<sub>3</sub> = hydrocarbon group) >30% and a polymer component 0.5-15 % having ≥1 kind of polar groups selected from -PO<sub>3</sub>H<sub>2</sub>, -SO<sub>3</sub>H, -CO<sub>2</sub>H, -P(:O)(OH)R<sub>1</sub> [R<sub>1</sub> = hydrocarbon group, OR<sub>2</sub> (R<sub>2</sub> = hydrocarbon group)], and cyclic acid anhydride-containing groups. The lithog. plate precursor provides superior printing images and shows high printing durability even under severe conditions and is effective for scanning exposure using a semiconductor laser.

IT 155554-91-9P

(latex, preparation and use of, for surface layer of electrophotog. lithog. plate precursor)

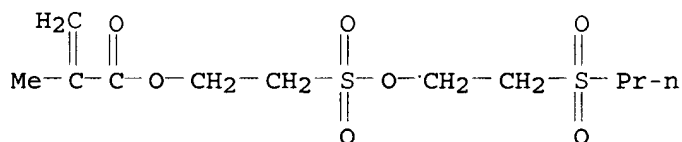
RN 155554-91-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,6-nonafluorohexyl ester, polymer with 2-carboxyethyl 2-propenoate, 1,2-ethanediyl di-2-propenoate and 2-[[2-(propylsulfonyl)ethoxy]sulfonyl]ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 149212-82-8

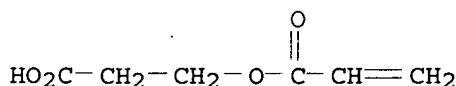
CMF C11 H20 O7 S2



CM 2

CRN 24615-84-7

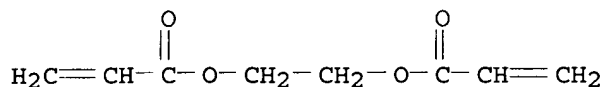
CMF C6 H8 O4



CM 3

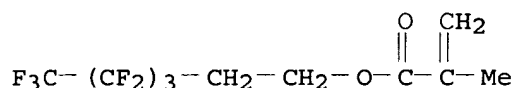


CRN 2274-11-5  
CMF C8 H10 O4



CM 4

CRN 1799-84-4  
CMF C10 H9 F9 O2



IC ICM G03G005-05  
ICS G03G005-147; G03G013-28  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
IT 149212-64-6P 149212-66-8P 149212-68-0P 149212-70-4P  
149212-71-5P 149212-74-8P 149212-75-9P 149212-76-0P  
149212-77-1P 149212-78-2P 149212-79-3P 149212-80-6P  
149212-81-7P 149212-83-9P 149212-84-0P 149212-85-1P  
149212-86-2P 149212-87-3P 149212-88-4P 149212-89-5P  
149212-90-8P 149234-31-1P 149234-33-3P 149234-35-5P  
149234-37-7P 149234-39-9P 149234-64-0P 149234-65-1P  
149234-66-2P 149234-67-3P 149234-68-4P 149234-69-5P  
149235-74-5P 149235-80-3P 149235-82-5P 149295-86-3P  
149333-66-4P 155554-91-9P 156321-46-9P 156622-62-7P  
156705-17-8P

(latex, preparation and use of, for surface layer of electrophotog.  
lithog. plate precursor)

L20 ANSWER 28 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1994:446534 HCAPLUS  
DOCUMENT NUMBER: 121:46534  
TITLE: Electrophotographic plate for  
electrophotographic lithographic plates  
INVENTOR(S): Kato, Eiichi; Kasai, Seishi  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: PCT Int. Appl., 213 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9215048	A1	19920903	WO 1992-JP188	1992 0221

W: US  
 RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE  
 JP 04268564 A2 19920924 JP 1991-78711 1991  
 0222  
 JP 04291265 A2 19921015 JP 1991-78175 1991  
 0319  
 JP 04304462 A2 19921027 JP 1991-94886 1991  
 0402  
 JP 04355457 A2 19921209 JP 1991-156246 1991  
 0531  
 EP 535236 A1 19930407 EP 1992-905099 1992  
 0221  
 EP 535236 B1 19961218  
 R: DE, GB  
 US 5342716 A 19940830 US 1992-946320 1992  
 1022  
 PRIORITY APPLN. INFO.: JP 1991-78711 A 1991  
 0222  
 JP 1991-78175 A 1991  
 0319  
 JP 1991-94886 A 1991  
 0402  
 JP 1991-156246 A 1991  
 0531  
 WO 1992-JP188 W 1992  
 0221

AB The title electrophotog. plate utilizing a photoconductor layer containing photoconductive ZnO, a spectral sensitizer dye, and a binder resin, the binder resin contains  $\geq 1$  resins (A) (weight average mol. weight  $1 + 10^3 - 2 + 10^4$ ) containing polymer component [CHala2(CO2R3)] [a1, a2 = H, halo, CN, hydrocarbon moiety; R3 = hydrocarbon moiety]  $\geq 30\%$  and a polymer component containing  $\geq 1$  polar groups selected from PO3H2, SO3H, CO2H, P(O)(OH)R1 (R1 = hydrocarbon or oxyhydrocarbon moiety), and a cyclic acid anhydride moiety 0.5-15%. In addition, the photoconductor layer contains nonaq. medium dispersed resin fine particles (L) having particle size less than that of the maximum diameter of the photoconductive ZnO particles utilized above. L is obtained by copolyng. a monofunctional monomer possessing  $\geq 1$  functional groups capable of decomposing to form CO2H with another monofunctional monomer(s) in the precursor of a nonaq. solvent-soluble dispersion-stabilizing resin with structure repeating units containing F- and(or) Si-containing substituents. The electrophotog. plate gives lithog. printing plates giving superior

printed copies even under severe ambient conditions and having good durability.

IT 149072-56-0

(latex particles, for electrophotog. lithog. plates)

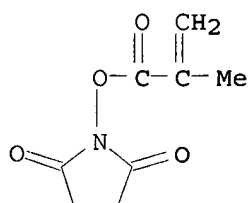
RN 149072-56-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,6-nonafluorohexyl ester, polymer with 2-carboxyethyl 2-propenoate, 1,2-ethanediyl di-2-propenoate and 1-[(2-methyl-1-oxo-2-propenyl)oxy]-2,5-pyrrolidinedione, graft (9CI) (CA INDEX NAME)

CM 1

CRN 38862-25-8

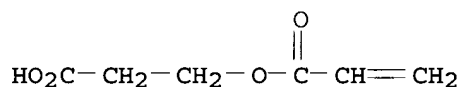
CMF C8 H9 N O4



CM 2

CRN 24615-84-7

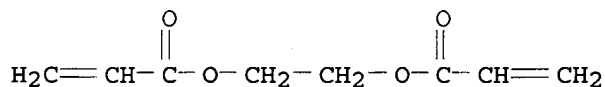
CMF C6 H8 O4



CM 3

CRN 2274-11-5

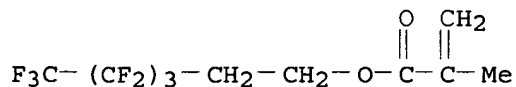
CMF C8 H10 O4



CM 4

CRN 1799-84-4

CMF C10 H9 F9 O2



IC ICM G03G005-05  
 CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and  
 Other Reprographic Processes)  
 Section cross-reference(s): 35

IT 149072-29-7 149072-31-1 149072-33-3 149072-34-4  
 149072-35-5 149072-36-6 149072-38-8 149072-39-9  
 149072-40-2 149072-41-3 149072-42-4 149072-43-5  
 149072-44-6 149072-45-7 149072-46-8 149072-47-9  
 149072-48-0 149072-49-1 149072-50-4 149072-51-5  
 149072-52-6 149072-53-7 149072-55-9 149072-56-0  
 149072-57-1 149072-58-2 149072-59-3 149072-61-7  
 149072-62-8 149072-63-9 149072-98-0 149072-99-1  
 149093-43-6 149093-44-7 149093-45-8 149093-46-9  
 149093-47-0 149093-48-1 149093-50-5 149093-51-6  
 149093-53-8 149093-58-3 149124-86-7 149333-75-5  
 150497-83-9 150497-84-0 150497-86-2 150497-88-4  
 150497-96-4

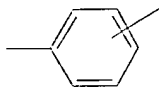
(latex particles, for electrophotog. lithog. plates)

L20 ANSWER 29 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:422526 HCAPLUS  
 DOCUMENT NUMBER: 121:22526  
 TITLE: lithographic plate precursor of  
 direct image type  
 INVENTOR(S): Kato, Eiichi; Ishii, Kazuo  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 127 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 530957	A1	19930310	EP 1992-306370	1992 0710
EP 530957 R: DE, GB	B1	19991222		
US 5368931	A	19941129	US 1992-910968	1992 0709
PRIORITY APPLN. INFO.:			JP 1991-169828	A 1991 0710
			JP 1991-220275	A 1991 0830
			JP 1991-231880	A 1991 0911

GI



I

AB The title **precursor** comprises a base and an image-receptive layer containing resin grains obtained by subjecting to dispersion polymerization in an organic solvent a monofunctional monomer which is soluble in the solvent but is insol. after polymerization and contains  $\geq 1$  functional group capable of producing  $\geq 1$  polar group through decomposition and a monofunctional polymer comprising a polymer chain containing  $\geq 1$  recurring unit each containing a Si- and/or F-containing substituent and bonded to one end a polymerizable double bond group represented by the formula  
 CHA1:CA2V- (V = O, CO<sub>2</sub>, OCO, CH<sub>2</sub>OCO, CH<sub>2</sub>CO<sub>2</sub>, SO<sub>2</sub>, CONR<sub>1</sub>, SO<sub>2</sub>NR<sub>1</sub>, CONCHCO<sub>2</sub>, CONHCONH, or I; R<sub>1</sub> = H or C1-18 hydrocarbyl; A<sub>1</sub>, A<sub>2</sub> = H, halogen, cyano, hydrocarbyl, or CO<sub>2</sub>R<sub>2</sub>; R<sub>2</sub> = H or hydrocarbyl).

IT 149368-85-4P 149434-28-6P  
 (preparation and copolymn. of, in preparing latexes for lithog  
 . plate **precursors**)

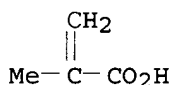
RN 149368-85-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,6-nonafluorohexyl ester, telomer with 2-carboxyethyl 2-propenoate and 2-mercaptoethanol, 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4

CMF C4 H6 O2



CM 2

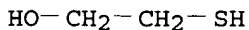
CRN 163148-87-6

CMF (C10 H9 F9 O2 . C6 H8 O4)x . C2 H6 O S

CM 3

CRN 60-24-2

CMF C2 H6 O S



CM 4

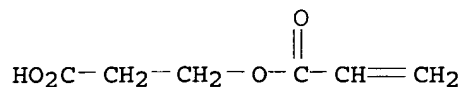
CRN 163148-86-5

CMF (C10 H9 F9 O2 . C6 H8 O4)x

CCI PMS

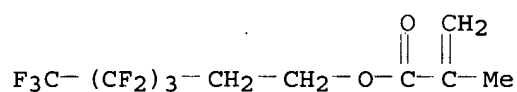
CM 5

CRN 24615-84-7  
CMF C6 H8 O4



CM 6

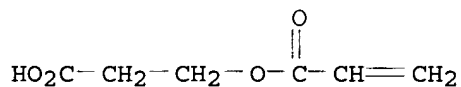
CRN 1799-84-4  
CMF C10 H9 F9 O2



RN 149434-28-6 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, telomer with 2-mercaptoethanol and  
phenylbis(trifluoromethyl)silyl 2-methyl-2-propenoate,  
3-[(1-oxo-2-propenyl)oxy]propanoate (9CI) (CA INDEX NAME)

CM 1

CRN 24615-84-7  
CMF C6 H8 O4

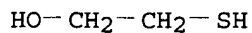


CM 2

CRN 163255-66-1  
CMF (C12 H10 F6 O2 Si . C4 H6 O2)x . C2 H6 O S

CM 3

CRN 60-24-2  
CMF C2 H6 O S



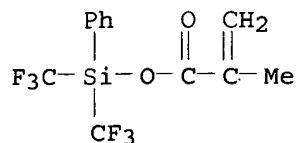
CM 4

CRN 163255-65-0  
CMF (C12 H10 F6 O2 Si . C4 H6 O2)x  
CCI PMS

CM 5

CRN 149072-54-8

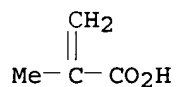
CMF C12 H10 F6 O2 Si



CM 6

CRN 79-41-4

CMF C4 H6 O2



IT 155554-40-8P 155554-91-9P

(preparation and use of, in image-receptive layers for  
lithog. plate precursors)

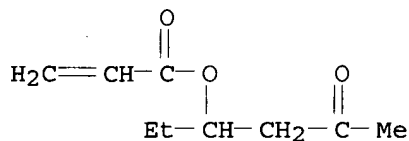
RN 155554-40-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
2-carboxyethyl 2-propenoate, 1-ethyl-3-oxobutyl 2-propenoate and  
3,3,4,4,5,5,6,6,6-nonafluorohexyl 2-methyl-2-propenoate, graft  
(9CI) (CA INDEX NAME)

CM 1

CRN 155554-39-5

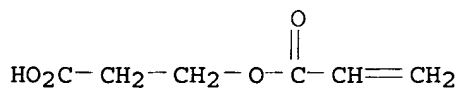
CMF C9 H14 O3



CM 2

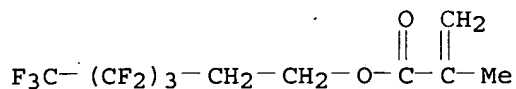
CRN 24615-84-7

CMF C6 H8 O4



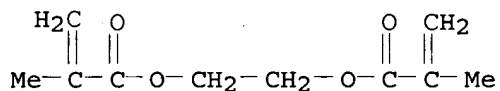
CM 3

CRN 1799-84-4  
 CMF C10 H9 F9 O2



CM 4

CRN 97-90-5  
 CMF C10 H14 O4

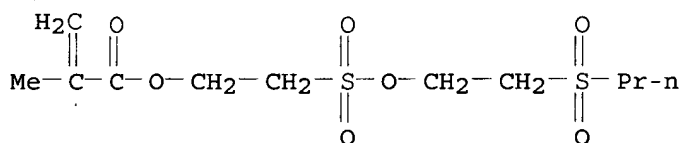


RN 155554-91-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,6-nonafluorohexyl  
 ester, polymer with 2-carboxyethyl 2-propenoate, 1,2-ethanediyl  
 di-2-propenoate and 2-[[2-(propylsulfonyl)ethoxy]sulfonyl]ethyl  
 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

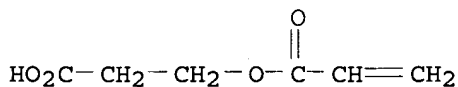
CM 1

CRN 149212-82-8  
 CMF C11 H20 O7 S2



CM 2

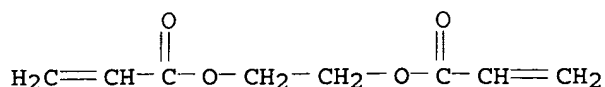
CRN 24615-84-7  
 CMF C6 H8 O4



CM 3

CRN 2274-11-5  
 CMF C8 H10 O4

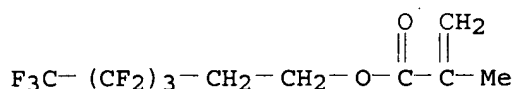




CM 4

CRN 1799-84-4

CMF C10 H9 F9 O2



- IC ICM G03F007-033  
ICS B41N001-14
- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST lithog plate **precursor** rein grain
- IT Fluoropolymers  
(image-receptive layers containing polymer latexes and, for lithog. plate **precursors**)
- IT Lithographic plates  
(**precursors**, direct image type, image-receptive layers containing polymer resin grains for)
- IT Siloxanes and Silicones, uses  
(methacrylate-terminated, preparation and use of, in image-receptive layers for lithog. plate **precursors**)
- IT 25322-25-2, Acrylic acid-methyl methacrylate copolymer  
155555-00-3 155555-01-4  
(image-receptive layers containing polymer latexes and, for lithog. plate **precursors**)
- IT 145168-75-8P 145168-89-4P 145168-94-1P 145169-02-4P  
145169-03-5P 145169-04-6P 145169-24-0P 145169-26-2P  
145169-30-8P 145807-38-1P 145807-40-5P 145807-41-6P  
145807-51-8P 145807-53-0P 145807-54-1P 145807-55-2P  
145807-56-3P 145807-57-4P 145807-63-2P 145807-64-3P  
145807-65-4P 145807-66-5P 145807-68-7P 145807-70-1P  
145807-71-2P 145807-72-3P 145807-78-9P 145807-80-3P  
146188-26-3DP, carboxy-terminated, ester with 2-hydroxyethyl methacrylate 147545-76-4P 149072-24-2DP, reaction products with 2-isocyanatoethyl methacrylate 149368-83-2P  
149368-85-4P 149434-15-1P 149434-21-9P 149434-25-3P  
149434-28-6P 149434-33-3P 149658-55-9P  
(preparation and copolymn. of, in preparing latexes for lithog. plate **precursors**)
- IT 2358-84-1DP, Diethylene glycol dimethacrylate, polymers with methacrylate-terminated siloxanes and methacrylates  
78830-72-5DP, polymers with methacrylate-terminated siloxanes and methacrylates 149212-88-4P 149234-31-1P 150372-99-9P  
150373-00-5P 150373-02-7P 150373-03-8P 150373-06-1P  
150373-07-2P 150373-08-3P 150391-01-8P 150391-02-9P  
150391-87-0P 150419-15-1P 150528-35-1P 150958-52-4P  
150997-02-7P 155554-20-4P 155554-21-5P 155554-22-6P  
155554-23-7P 155554-24-8P 155554-25-9P 155554-26-0P  
155554-27-1P 155554-28-2P 155554-29-3P 155554-30-6P

155554-31-7P	155554-32-8P	155554-33-9P	155554-34-0P
155554-35-1P	155554-36-2P	155554-37-3P	155554-38-4P
<b>155554-40-8P</b>	155554-41-9P	155554-42-0P	155554-43-1P
155554-44-2P	155554-45-3P	155554-46-4P	155554-47-5P
155554-48-6P	155554-49-7P	155554-50-0P	155554-51-1P
155554-52-2P	155554-53-3P	155554-54-4P	155554-55-5P
155554-56-6P	155554-57-7P	155554-58-8P	155554-59-9P
155554-60-2P	155554-61-3P	155554-62-4P	155554-64-6P
155554-65-7P	155554-67-9P	155554-68-0P	155554-69-1P
155554-70-4P	155554-71-5P	155554-72-6P	155554-74-8P
155554-75-9P	155554-76-0P	155554-77-1P	155554-78-2P
155554-79-3P	155554-80-6P	155554-81-7P	155554-82-8P
155554-83-9P	155554-84-0P	155554-85-1P	155554-86-2P
155554-87-3P	155554-88-4P	155554-89-5P	155554-90-8P
<b>155554-91-9P</b>	155554-92-0P	155554-93-1P	155554-94-2P
155554-95-3P	155554-96-4P	155554-97-5P	155554-98-6P
155554-99-7P	155569-64-5P	155609-29-3P	155616-65-2P
155643-92-8P	155643-93-9P		

(preparation and use of, in image-receptive layers for  
lithog. plate precursors)

L20 ANSWER 30 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1994:120660 HCAPLUS  
 DOCUMENT NUMBER: 120:120660  
 TITLE: Electrophotographic lithographic master  
 INVENTOR(S): Kato, Eiichi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 64 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 04366848	A2	19921218	JP 1991-142064	1991 0613
JP 2813078	B2	19981022		
PRIORITY APPLN. INFO.:			JP 1991-142064	1991 0613

AB In the title master comprising an elec. conductive support having thereon  $\geq 1$  photoconductive layers containing photoconductive zinc oxide, spectral sensitizing dye, and binder resin, said binder resin contains resin (A). Resin (A) (weight average mol. weight 1.0 + 103-2 + 104) has (CHAlCA2CO2R) (A1, A2 = H, halo, cyano, hydrocarbon; R = hydrocarbon) as a repeating unit. Resin (A) is terminated at one end of the backbone chain with  $\geq 1$  polar groups selected from PO3H2, SO3H, CO2H, etc. Said photoconductive layers addnl. contain nonaq. solvent-dispersed resin particles whose size is equal to or smaller than that of the ZnO particles. The above nonaq. solvent-dispersed resin particles are obtained by dispersing and polymerizing  $\geq 1$  monofunctional monomers (containing  $\geq 1$  precursors of groups such as thiol, amino, phosphono, etc.) in the presence of a soluble dispersion-stabilizing resin.

IT 149235-49-4P

(preparation of, as resin for electrophotog. lithog. master)

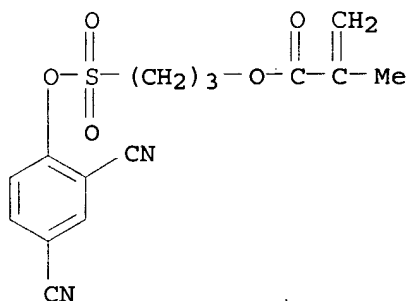
RN 149235-49-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
 2-carboxyethyl 2-propenoate, 3-[(2,4-dicyanophenoxy)sulfonyl]propy  
 1 2-methyl-2-propenoate and pentyl 2-methyl-2-propenoate, graft  
 (9CI) (CA INDEX NAME)

CM 1

CRN 149234-43-5

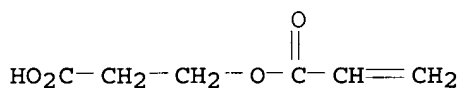
CMF C15 H14 N2 O5 S



CM 2

CRN 24615-84-7

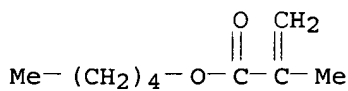
CMF C6 H8 O4



CM 3

CRN 2849-98-1

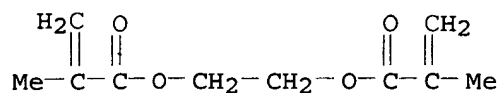
CMF C9 H16 O2



CM 4

CRN 97-90-5

CMF C10 H14 O4



IT 149235-66-5P

(preparation of, for electrophotog. lithog. master)

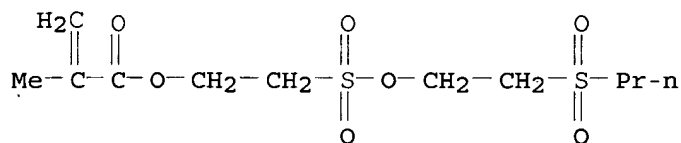
RN 149235-66-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, pentyl ester, polymer with  
 2-carboxyethyl 2-propenoate, 1,2-ethanediyl di-2-propenoate and  
 2-[[2-(propylsulfonyl)ethoxy]sulfonyl]ethyl 2-methyl-2-propenoate,  
 graft (9CI) (CA INDEX NAME)

CM 1

CRN 149212-82-8

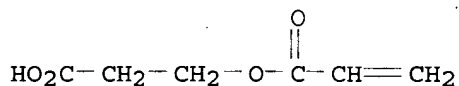
CMF C11 H20 O7 S2



CM 2

CRN 24615-84-7

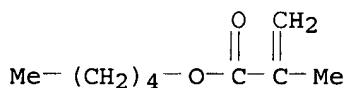
CMF C6 H8 O4



CM 3

CRN 2849-98-1

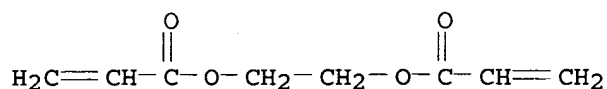
CMF C9 H16 O2



CM 4

CRN 2274-11-5

CMF C8 H10 O4



IC ICM G03G005-05  
ICS G03G005-06; G03G013-28  
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
IT 149235-48-3P **149235-49-4P** 149235-51-8P 149235-53-0P  
149235-54-1P 149235-55-2P 149235-56-3P 149235-57-4P  
149235-58-5P 149275-09-2P 149275-10-5P  
(preparation of, as resin for electrophotog. lithog. master)  
IT 25719-51-1DP, carboxy-terminated, ester with 2-hydroxyethyl methacrylate, polymer with ethyleneglycol di-acrylate and methacrylic acid ester 149235-60-9P 149235-61-0P  
149235-62-1P 149235-63-2P 149235-64-3P 149235-65-4P  
**149235-66-5P** 149235-67-6P 149235-68-7P 149235-69-8P  
149235-70-1P 149235-71-2P 149235-73-4P 149235-84-7P  
149275-11-6P 149275-12-7P 149476-82-4P 149478-77-3P  
149512-89-0P 149512-92-5P 149512-93-6P 149512-94-7P  
149512-95-8P 149512-96-9P 149512-97-0P 149512-98-1P  
149512-99-2P 149544-80-9P  
(preparation of, for electrophotog. lithog. master)

L20 ANSWER 31 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1993:549517 HCAPLUS  
DOCUMENT NUMBER: 119:149517  
TITLE: Electrophotographic plate for lithographic plate preparation  
INVENTOR(S): Kato, Eiichi; Ishii, Kazuo  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04251861	A2	19920908	JP 1991-26850	1991 0128
JP 3048178	B2	20000605	JP 1991-26850	1991 0128

PRIORITY APPLN. INFO.: JP 1991-26850

AB In the title electrophotog. plate employing  $\geq 1$  photoconductive layer containing photoconductive ZnO and a binder resin, the binder resin contains  $\geq 1$  resin (weight-average mol. weight  $1 + 103 \cdot 2 + 104$ ) containing the repeating unit  $\text{CHa1Ca2}(\text{CO}_2\text{R})$  [ $\text{a1}, \text{a2} = \text{H}, \text{halo}, \text{CN}, \text{hydrocarbon moiety}; \text{R} = \text{hydrocarbon moiety}$ ]  $\geq 30\%$  and a polymer component containing groups selected from  $\text{PO}_3\text{H}_2$ ,  $\text{SO}_3\text{H}$ ,  $\text{CO}_2\text{H}$ ,  $\text{PO}(\text{OH})\text{R1}$  ( $\text{R1} = \text{hydrocarbon moiety}, \text{oxyhydrocarbon moiety}$ ), and acid anhydride groups  $0.5\text{-}15\%$

and the photoconductive layer addnl. contains nonaq. solvent-dispersed resin particles of particle size equal to or less than that of the ZnO particles. The above nonaq. solvent-dispersed resin particles are obtained by dispersion polymerizing  $\geq 1$  monofunctional monomer containing  $\geq 1$  CO<sub>2</sub>H precursor in the presence of a soluble dispersion-stabilizing resin.

IT 130094-33-6P 135740-33-9P 135740-39-5P  
(preparation of, as binder resin, for electrophotog. lithog. plates)

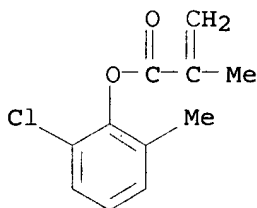
RN 130094-33-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-chloro-6-methylphenyl ester, polymer with 2-carboxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 126969-77-5

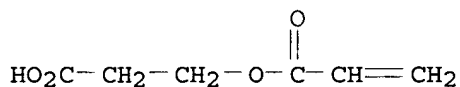
CMF C11 H11 Cl O2



CM 2

CRN 24615-84-7

CMF C6 H8 O4



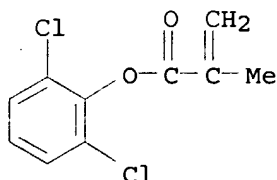
RN 135740-33-9 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with 2,6-dichlorophenyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 126969-69-5

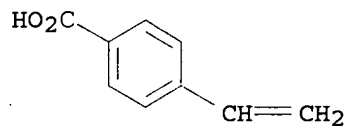
CMF C10 H8 Cl2 O2



CM 2

CRN 1075-49-6

CMF C9 H8 O2



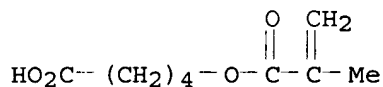
RN 135740-39-5 HCAPLUS

CN Pentanoic acid, 5-[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with 2-naphthalenyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 73903-37-4

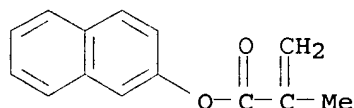
CMF C9 H14 O4



CM 2

CRN 10475-46-4

CMF C14 H12 O2



IC ICM G03G005-05

ICS C08K003-22; C08L101-00; G03G005-08; G03G013-28

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 65697-21-4P 65697-22-5P 126969-70-8P 126969-78-6P  
**130094-33-6P** 130952-79-3P 131808-63-4P 135740-30-6P  
 135740-31-7P 135740-32-8P **135740-33-9P** 135740-35-1P  
 135740-36-2P 135740-37-3P 135740-38-4P **135740-39-5P**  
 135740-41-9P 135740-43-1P 135740-44-2P 135740-46-4P  
 135770-63-7P 135820-62-1P 139663-63-1P 142648-25-7P  
 146817-57-4P 146817-58-5P 146817-60-9P 146817-61-0P

(preparation of, as binder resin, for electrophotog. lithog  
 . plates)